

ANIMAL SPECTACULA OF THE ROMAN EMPIRE

by

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## ABSTRACT

Although gladiatorial spectacles in ancient Rome have been the subject of a great deal of recent scholarly literature, comparatively little attention has been paid to the contemporary animal spectacles and staged beast-hunts (*venationes*), the events most closely associated with gladiatorial combat in the imperial period. A number of different works have dealt with such topics as the origins and organization of gladiatorial combat in ancient Rome, but relatively few scholars have attempted to address similar questions concerning the *venationes*. Only a single monograph in English, written approximately 60 years ago, has been produced on the phenomenon of Roman animal spectacles.

The purpose of this thesis is to give a comprehensive account of Roman *venationes* and animal displays, incorporating, in certain cases, evidence that has only recently become available or has largely been overlooked by previous scholars. A wide variety of evidence will be used in this study, ranging from literary sources to archaeological data. The paper will trace the historical development of these spectacles, from Republican displays staged in imitation of contemporary Greek events, to the beast-hunts of the Byzantine empire. Another major focus of the thesis will be the infrastructure and organization behind Roman animal spectacles, in particular the methods by which the Romans captured and transported the large numbers of animals necessary for events staged throughout the empire.

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## Introduction

Although staged beast-hunts, or *venationes*, were one of the most important public entertainments in ancient Rome, comparable in their popularity to both gladiatorial games and chariot-races, such events on the whole have not received the scholarly attention they deserve. Numerous works have been written on 'blood-sports' in Rome, such as, to take a recent example, Wiedemann's Emperors and Gladiators, but almost all of them treat the *venationes* in a relatively superficial fashion. In particular, previous studies have largely failed to address the infrastructure and organization behind the beast-hunts.

The relative neglect of *venationes* in modern discussions of Roman spectator events is not the only reason to write about the beast-hunts. A number of secondary works have been written on animals and spectacles involving them in the Greco-Roman world, but the majority are relatively dated, such as Keller's Die Antike Tierwelt (1913) and Jennison's Animals for Show and Pleasure in Ancient Rome (1937). While these books still contain much useful information, and are cited throughout the dissertation, important evidence has been discovered since their publication, making a new study of the Roman beast-hunts necessary. In addition, the present work aims to reexamine other evidence largely overlooked by previous scholars. The letters of Libanius and Symmachus, for example, many of which have not yet been translated into English, will be studied for the evidence they provide on the beast-hunts and other related spectacles.

It should be pointed out that *venationes* were not the only form of animal entertainment in ancient Rome. Although the main focus of this dissertation is the beast-hunts, the Romans also staged other events where animals were merely exhibited to spectators or performed tricks for their amusement. As will be seen, wild animals were also often used to kill condemned criminals in the arena. For the purposes of clarity, throughout this work the term *venatio* will be used for a beast-

hunt proper, while the events in which animals were not killed will be referred to as 'displays'. The term *spectaculum/a* will be used for Roman animal events in general, both of the violent and non-violent varieties.

The provision of Roman animal *spectacula* entailed similar problems to those faced by zoos in the modern world: how best to ensure a steady supply of exotic animals to various locales, and keep them healthy after they arrived at their destinations. Although many of the animals involved in the *spectacula* were slaughtered relatively soon after their capture, others involved in displays would have to be looked after for an extended period of time. While ancient evidence for the Roman animal-trade is not abundant, enough does exist to give a coherent sense of the arrangements made both to procure and maintain thousands of captive animals throughout the empire.

The primary objective of this dissertation is to give a detailed outline of the historical development of the Roman *spectacula*, much as different authors have done for the Roman gladiatorial games. Various topics, ranging from the types of performers employed in such events, to the structural modifications undertaken in different venues to allow animal displays and *venationes*, will be discussed in the course of this work. Special attention will be paid to the infrastructure behind these *spectacula*: as will be seen, a large number of both soldiers and civilians throughout the empire ensured that such events could go ahead smoothly in Rome and elsewhere.

In terms of general organization, the first major subject to be addressed in this dissertation will be the historical development of animal *spectacula* in Rome, in order to provide a chronological framework for subsequent discussion. The next general topic to be looked at will be the organization and personnel necessary for the staging of these events in Rome and other centres, including animal-enclosures and performers in the arena. The focus then shifts to how the animals were captured on the frontiers and safely shipped to their ultimate destinations, as well as how various

venues were altered to make them safe for events involving animals. The appendices in the dissertation deal with such topics as the end of animal *spectacula*, their effect upon animal populations in antiquity, and the individual species employed by the Romans for their enjoyment.

The first section of the dissertation, Greek and Republican Antecedents, looks at the various Greek and early Republican animal spectacles which may have acted as precedents for the elaborate events of the late Republic and imperial period. In addition, native Italian traditions which may have contributed to later Roman exotic animal *spectacula*, such as the wild animal combats of the Samnites and the animal-enclosures (*vivaria*) of Republican aristocrats, are also examined.

In the second section, Late Republican and Imperial Animal Spectacula, a study is made of the various animal events of the late Republican period, such as those staged by Pompey and Caesar. Particular attention is paid to Cicero's correspondence concerning the planned *venatio* of the aedile Caelius, a spectacle which in particular sheds some light upon the methods used by the Romans to obtain exotic animals during this period. An examination is then made of the various animal events staged during the imperial period, and the changes to the organization and infrastructure of animal *spectacula* made by such emperors as Augustus and Domitian. The letters of Symmachus and Libanius are studied in detail to provide information about the staging of these events by Roman officials under the empire. Various features of the animal *spectacula* put on by wealthy citizens are also examined, including corporations such as the *Telegenii* who provided the hunters and beasts. Finally, the specialized individuals, such as doctors, are also discussed.

The third section of the dissertation, Animal Enclosures and their Administration, looks at the different types of animal-enclosures which existed during the imperial period, as well as the various individuals entrusted with their upkeep. The animal-pens specifically used for the maintenance of animals employed in Roman *spectacula*, such as those in Laurentum and Rome itself, are first of all

examined, while the care and training of animals in these facilities are also discussed. The evidence for private enclosures, such as those belonging to various emperors, is also investigated. In the fourth section, Performers and Spectacle in the Arena, an examination is made of the various types of spectacles involving animals in the Roman world. The various performers involved are also discussed in detail, including such aspects as their equipment and social status.

The fifth section, The Capture and Transport of Animals, looks at the means by which animals were obtained for Roman *spectacula*, including those which were given as gifts to the Romans by foreign monarchs. The methods used to capture and transport beasts are also examined in detail, including those depicted on the famous 'Great Hunt' mosaic from Piazza Armerina. In the sixth section, Supply Personnel for Animal Spectacula, the individuals who captured animals throughout the empire for the Roman *spectacula* are discussed, both civilians and soldiers.

The seventh section, Principal Venues for Animal Spectacula, examines the various structures in which animal *spectacula* were staged throughout the empire. These buildings ranged from large amphitheatres like the Colosseum to theatres and stadia in the eastern empire, which were specially adapted for animal events. This section also examines various props, such as artificial trees, as well as the structural modifications made to different venues to allow for marine events involving animals. In the eighth section, The End of Animal Spectacula, the reason for the eventual disappearance of these events is discussed. Roman animal *spectacula*, unlike gladiatorial combats, do not appear to have been adversely affected by the conversion of the empire to Christianity. Problems of supply were evidently the main cause for their disappearance.

The ninth section, Animal Distribution, discusses the ancient populations and ranges of the various exotic animals which the Romans imported for their *spectacula*. It is argued that the effect of this widespread animal capture alone on certain species has sometimes been exaggerated by modern scholars. While the death



of thousands of animals in the *venationes* did of course negatively affect various animal populations, particularly in North Africa, other factors, such as the clearance of previous wilderness for agricultural use, were just as much or more damaging in this regard.

Finally, the last section of the dissertation, The Animals of the *Spectacula*, examines the individual animal species that are known to have participated in Roman animal *spectacula*, from elephants to hares. The ancient range of these creatures, as well as the specific methods used in capturing them, are among the topics of discussion. The appearances of each of these animals in Roman displays and *venationes* are also examined in detail.

Many of the conclusions reached in this dissertation are conjectural, rather than being statements of fact. This is largely because of the nature of the evidence for ancient *venationes* and animal displays. As will later be discussed in more detail, many ancient authors, apart from recording the staging of these events, were otherwise not interested in noting other pertinent details, such as the infrastructure behind the capture and transport of the necessary animals. Problems also exist with the archaeological evidence relating to Roman *spectacula*. Apart from mosaic and wall-paintings, most other evidence of this type (including the animals themselves) is of a more 'perishable' nature. Apart from possible post-hole marks in the soil, for example, nothing remains of wooden animal-enclosures from the ancient world.

### Greek and Republican Antecedents

In this section we shall examine the precedents for the *venationes* and animal displays of imperial Rome. As we shall see, two contemporary but different traditions, both of which were important antecedents for later animal *spectacula*, existed simultaneously in Republican Rome. The Greek practice of periodically exhibiting wild animals in public strongly influenced the development of such displays in Rome. The emergence of *venationes* in the Republican period, however, owed little to Greek influence. The native Italian tradition of hunting wild animals, as well as contemporary gladiatorial spectacles, were evidently far more important factors in the development of beast-hunts.

#### *Greek Animal Spectacles:*

Animal exhibitions and processions are known to have occurred in Greece as early as the fourth century BC. Isocrates, commenting upon the spectacles of trained lions and bears in Athens, states that such festivals occurred every year (...καθ' ἑκάστον τὸν ἐνιαυτὸν...)<sup>1</sup> He thereby implies that such events had been occurring for some time in Athens, but unfortunately does not specify whether they occurred on a set date each year, or merely occurred whenever animal-trainers passed through the city.

One of the most famous, and perhaps influential, Greek animal spectacles was Ptolemy II's elaborate zoological procession staged in Alexandria in 275/74 BC.<sup>2</sup> Some idea of this procession's size can be gleaned from the fact that it is said to have taken an entire day to pass through the stadium of Alexandria.<sup>3</sup> The hundreds of animals participating in the procession included Indian elephants, antelopes, lions, leopards, cheetahs, camels, ostriches, a rhinoceros, a bear, and a giraffe.<sup>4</sup>

The majority of Greek animal events, like that of Ptolemy II, appear to have been non-violent, but there were exceptions. One was the particular type of bull-fighting practiced in Thessaly (see page 273). This spectacle, however, does not appear to have contributed to the violence of Roman *venationes*. Thessalian bull-fighting was introduced to Rome by Julius Caesar, long after Roman animal *spectacula* had become violent on their own.<sup>5</sup>

Many Greek animal-displays appear to have occurred as part of religious festivals, such as a procession of wild animals dedicated to Artemis which Theocritus alludes to, and they, like their secular counterparts, usually did not include the slaughter of the animals involved.<sup>6</sup> One apparent exception is the festival of Artemis at Patrae which Pausanias witnessed in the second century AD, featuring a priestess riding in a chariot drawn by stags, as well as the grisly burning alive of a number of wild animals.<sup>7</sup> As Jennison notes, however, the animal slaughter included in this festival may well have come about because of the influence of the Roman *venationes*: this appears especially likely in a city like Patrae, which had been made a Roman colony by Augustus, and which included a large number of ethnic Italians in its population.<sup>8</sup> Although Burkert quite rightly points out that religious 'fire rituals' were not unheard of even in the archaic Greek world, the number and variety of animals consigned to flames in Patrae were apparently exceptional, again suggesting possible Roman influence: Pausanias goes so far as to call the festival in Patrae an ἐπιχώριος θυσίας.<sup>9</sup>

It has been suggested that, like gladiatorial combats, the early animal-displays of ancient Rome may have included a religious component, perhaps imported from Greece. Loisel speculates that the lions, bears, and leopards belonging to followers of Cybele and Isis in Italy may have been influential in the development of Roman spectacles. Since neither of these cults was formally established in Rome before 204 BC, however, some time after the first recorded animal-displays in the city, it is questionable how much direct influence they really had.<sup>10</sup>

*Early Roman Animal Spectacula:*

The earlier Roman animal *spectacula*, like the majority of their counterparts in Greece and the Hellenistic world, appear to have concentrated more on animal exhibition than on slaughter. The spread of non-violent animal shows from the eastern Mediterranean to the west was no doubt facilitated by a corresponding movement of entertainers; many Greek animal showmen, as depicted in a number of Roman paintings and sculptures, may have begun to appear at an early date in Italy as Roman contact with the eastern Mediterranean intensified in the Republican period.<sup>11</sup> The earliest recorded displays of wild animals in Rome took place in 275 and 250 BC, when elephants captured from Pyrrhus in Italy and the Carthaginians in Sicily were exhibited respectively by Manius Curius Dentatus and Lucius Metellus.<sup>12</sup>

In the late third century BC Plautus refers to ostriches in the circus (...*vola curriculo istuc marinus passer per circum solet...*) and *mures Africanos* (see below) being led in procession, the latter suggesting that the killing of exotic animals in *venationes* evidently had not yet become more popular than mere public display.<sup>13</sup> This impression appears to be borne out by the fact that the first recorded *venatio* in Rome only occurred in 186 BC (see page 17): in addition, Pliny records that the first combats involving multiple lions and elephants took place in 104 and 99 BC respectively, a full century after Plautus.<sup>14</sup> Prior to the development of a keen Roman interest in the large-scale slaughter of exotic animals, apparently at sometime in the second century BC, their killing at various *spectacula* was evidently limited in scale.

A *spectaculum* staged by Nasica and Lentulus, the curule aediles of 169 BC, in the Circus Maximus does not appear to have resulted in the slaughter of the animals involved.<sup>15</sup> Livy records that 63 *Africanæ*, 40 bears, and an unspecified number of elephants were involved in this particular display. No mention is made of these animals being killed, only that they participated (*luisse*) in the spectacle. The use of

this verb indeed suggests that the event was non-violent in nature. Further support for this view comes from the passage of Pliny just cited, which explicitly dates the first elephant combat in Rome to some 70 years after Nasica and Lentulus' *spectaculum*.

Although we can determine the general nature of early Roman animal *spectacula*, it is quite often difficult to identify what animals participated in such events. A much-disputed passage of Plautus is relevant here: namely, it is unclear what animals the playwright is referring to in the *Peonulus*.<sup>16</sup> The remark in question is a jest made by one of the characters that a certain Carthaginian wants to sell *mures Africanos* to the aediles in Rome for the procession at one of their games (...*non audis? mures Africanos praedicat in pompam ludis dare se velle aedilibus...*). Some scholars have suggested that the use of *mures Africanos* in this passage is a periphrasis for leopards, animals that were frequent participants in Republican *spectacula*. Jennison, however, prefers to see the term as a joking reference to all of the different species of African animals obtained by the Roman aediles for their spectacles. Presumably Plautus would not have made such a joke if the importation of these animals was something with which his audience was unfamiliar.<sup>17</sup>

*Africanae bestiae* are referred to in several Roman documents, but it is not always clear what specific animals are meant by this term. Livy's use of the phrase in describing the *spectaculum* of 169 BC appears to denote lions, leopards, and possibly other large felines, as does Augustus' use of it in his *Res Gestae*.<sup>18</sup> No extant Roman inscription records the presence of *Africanae bestiae* and lions at the same show, which suggests that the former term could include the latter animal. Pliny, however, discusses the senatorial ban on *Africanae bestiae* in the middle of his section describing *panthera*, possibly suggesting that the phrase could be used in reference to leopards alone. A further complication in the use of the adjective 'African' results from the probability that on some occasions, animals actually imported from Asia Minor, but also native to North Africa, may have been described

as *Africanæ* in advertisements of upcoming *spectacula* because of the reputation for fierce animals which the continent enjoyed amongst many Romans.<sup>19</sup>

#### *Roman Vivaria and Animal Enclosures:*

Displays of animals, like the processions of captured elephants staged by Dentatus and Metellus, were not the only opportunity contemporary Romans had to view exotic creatures. Many wealthy Romans of the Republic possessed animal enclosures, or *vivaria*, on the grounds of their estates, stocked with wild beasts from Africa and other regions.<sup>20</sup> The enclosures of Hortensius and Lucullus, for instance, were both famous in the late Republican period.<sup>21</sup> Animal preserves of some kind were to be found in Rome from at least the mid-second century BC onwards: a speech of Scipio Aemilianus quoted by Aulus Gellius refers to a *roborarium*, an enclosure which evidently took its name from the oak panels used to enclose it.<sup>22</sup> Such venues, used for occasional hunting as well as breeding of livestock, were instrumental in inculcating many wealthy Romans with the same love of hunting as that possessed by aristocratic Greeks.<sup>23</sup>

To judge from a passage of Varro, writing in the first century BC, the transition of the small traditional Roman hare-enclosures (*leporaria*) to large *vivaria* containing such animals as deer and wild goats only took place on a large scale at a date near the author's own lifetime, most likely reflecting the increased supply of wild animals reaching Rome in the late Republic.<sup>24</sup> According to Pliny, the first Roman aristocrat to establish a *vivarium* of the larger type was Quintus Fulvius Lippinus, otherwise known as an accomplished snail-breeder: the 40 *iugera vivarium* he set up in Tarquinii shortly before 50 BC contained such animals as stags, boars, wild sheep, and roes. Lippinus' *vivarium* served as a precedent for the enclosures of other Roman nobles, such as the 50 *iugera therotrophium* of Hortensius in Laurentum.<sup>25</sup> The chronological development of these *vivaria* would be consistent

with the series of Roman conquests in the late Republic: the successful outcome of the Punic Wars gave Rome access to a large number of African animals, while the subsequent expansion of Roman power in the first century BC into areas such as Gaul and Asia Minor no doubt greatly multiplied the number and variety of exotic animals available for Roman aristocrats to stock their *vivaria* with. Some of the animals on the estate of Marcus Pupius Piso, for example, may have been acquired through contacts he acquired while serving under Pompey in the latter's eastern campaigns.<sup>26</sup>

Republican *vivaria* in Gaul and other provinces were evidently substantially larger than their counterparts in Italy, perhaps reflecting in part the greater variety and number of wild animals to be found in or closer to those regions.<sup>27</sup> Columella, in describing the fencing used for *vivaria*, states that in Gaul and other provinces such enclosures could be built on a much larger scale than in Italy because of the *locorum vastitas* north of the Alps.<sup>28</sup> Varro records a contemporary animal-enclosure in Transalpine Gaul of approximately 36 square kilometres in size, which he considered to be much larger than any such structure to be found in Italy.<sup>29</sup>

Although direct evidence is lacking, Roman *vivaria* may have partially drawn their historical inspiration from Hellenistic animal-enclosures, in particular that possessed by Ptolemy II (283-46 BC) in Alexandria, which appears to have continued in use for centuries after his death.<sup>30</sup> According to Jennison, an enclosure of approximately 100 acres would have initially been required to house the vast assortment of animals employed in Ptolemy's famous procession.<sup>31</sup> This enclosure, or at least part of it, may have continued in use for the faunal collections of later Ptolemies, although the evidence for this is scanty at best. Athenaeus, drawing upon a description made in the second century BC of Ptolemy VII's royal palace in Alexandria, records the presence there of Median pheasants, some of which were actually bred in Egypt.<sup>32</sup> Strabo, drawing upon the late second century BC

geographer Artemidorus' description of a rhinoceros, states that the latter saw one of these animals in Alexandria, presumably in some sort of state-owned *vivarium*. To judge from Artemidorus' description of the animal, it was an 'exotic' one-horned Indian rhinoceros rather than a two-horned African one he saw.<sup>33</sup> In addition, the giraffe exhibited by Julius Caesar in Rome in 46 BC, as well as the rhinoceros and hippopotamus killed in Augustus' Roman spectacle of 29 BC, may have been taken as war booty from Alexandria.<sup>34</sup>

If such a *vivarium* did continue in existence until the Roman takeover of Egypt, it may well have continued in use under Augustus and subsequent emperors for the many animals imported from Ethiopia for spectacles in Rome and elsewhere. Philo records the presence of lions, bears, and leopards, as well as their handlers, in first century AD Alexandria, while Galen comments that elephants, presumably for use in various spectacles, were a common sight there a century later. Jennison speculates that the animal-trainers of that city would have found ready employment throughout the empire in various *venationes*.<sup>35</sup>

Other Hellenistic enclosures, such as those possessed by the Antigonid kings of Macedonia (until 168 BC), may have also served as prototypes for early Roman *vivaria*.<sup>36</sup> A more contemporary inspiration for the Roman animal-pens of the first century BC may have been the animal-enclosure with attached hunting-grounds established in Pontus by Mithridates VI (120-63 BC), as well as the famous Syrian temple in Hieropolis with its own *vivarium* and collection of wild animals.<sup>37</sup> In any case, the Latinized Greek terms (for example *therotrophium*) used by authors such as Varro to denote such structures strongly hint at the possibility that early Roman *vivaria* drew their inspiration from the Greek east.<sup>38</sup>

Apart from their use as hunting-preserves, private Roman enclosures could also be used to stage privately sponsored animal-displays similar to contemporary public exhibitions. In an incident recounted by both Varro and Pliny, Quintus Hortensius' *therotrophium* was the site of an elaborate (and non-fatal) reenactment



of the myth of Orpheus, complete with many different types of animals. According to Varro this display differed from the contemporary *venationes* of the aediles only in the absence of African animals.<sup>39</sup> Private mythological reenactments like that staged by Hortensius may well have been one of the models for the far more bloody mythological reenactments staged during the *spectacula* of the imperial period.

Apart from the *vivaria* maintained by wealthy Romans for their personal pleasure, the relatively small number of animals used in early *venationes* and displays were likely kept beforehand in state or privately-owned enclosures in Italy, like the one from which Caesar had a number of elephants sent to Africa just before the battle of Thapsus in 46 BC.<sup>40</sup> The elephant which Caesar is said to have earlier brought with him to Britain would have also likely come from such an enclosure. Perhaps the strongest argument for the existence of such a structure involves the forty elephants carrying torches which escorted Caesar to the Capitol on the last day of his triumph in 46 BC: as Jennison states, training elephants to perform such a trick would take a great deal of time, which means that these elephants could not have been those which Caesar captured at Thapsus some six months earlier in the year.<sup>41</sup>

Some evidence also exists for late Republican commercial enclosures in the northern provinces. Columella, writing in the mid-first century AD, notes that animal-enclosures intended for profit, as opposed to sport, need forest and a natural or artificial water supply to keep the captive animals fed. In this passage Columella seems to be referring to the animal-pens of Gaul and other provinces, since he implies that animals in Italian enclosures were, on the contrary, fed by their keepers.<sup>42</sup> Although Columella is writing in the early imperial period, he nowhere suggests that these structures outside of Italy were a recent innovation: presumably those in Gaul were set up soon after Caesar's conquest of the region.<sup>43</sup>

*Roman Hunting and the Development of the Venationes:*

The aim of this section is to examine the possible antecedents for the *venationes* of ancient Rome, events in which the participating beasts were hunted and slaughtered in the arena, rather than merely being exhibited to the public. Although, as we have just seen, the development of *vivaria* and animal displays in the Roman provinces seems to be at least partially based upon Greek precedents, Roman hunting practices initially evolved independently of such influence. Like most ancient peoples, the Romans appear to have been active hunters, in addition to their agricultural pursuits. Wildlife like boar and deer are known to have been hunted in the region of Rome before the development of the city. The fact that Diana, goddess of the hunt, predated the development of the Roman state in Latium also suggests that hunting was a common activity in the area from an early date.<sup>44</sup>

Hunting, however, does not appear to have been an especially esteemed activity amongst the Romans. The Roman aristocracy, unlike that of the Greeks, had no real tradition of hunting as a 'social pastime' until it became involved with the Hellenistic states. Such an activity was at variance with the strong Roman agricultural tradition: while the Greeks praised the hunting prowess of such notables as Alexander the Great, the Roman hero (and farmer) Cincinnatus was praised for returning to his plough after his exploits.<sup>45</sup> The earliest Roman aristocrat credited with a strong interest in hunting was Aemilius Paullus, the conqueror of Macedon, and his son Scipio Aemilianus in the second century BC.<sup>46</sup> Plutarch records that Aemilius Paullus took pains to educate his sons in all the Greek arts, including hunting, and that the latter art in fact could be taught only by Greeks at that time (...διδάσκαλοι θήρας Ἕλληνες ᾔσαν...).<sup>47</sup> The expansion of Roman power during this period into areas with rich hunting grounds like Spain, or areas with strong traditions of hunting animals like leopards and lions, as in the Near East, may well have also provoked Roman interest in hunting and/or exotic animals foreign to Italy.<sup>48</sup> Roman

authors such as Varro and Sallust, however, ridiculed the hunting practiced by Hellenized Roman aristocrats, Sallust going so far as to call such activity a ...*servile officium*.<sup>49</sup>

Hunting, both for private and 'public' purposes, was virtually unrestricted throughout the Roman world, except for injunctions against hunting in sacred areas and on religious holidays. Only in the later empire did restrictions on hunting emerge. An imperial edict of 414 AD allowed Roman subjects to kill lions threatening their property without fear of prosecution, thereby implying that hunting of lions at this time (eg for the *venationes*) was normally limited to imperial officials.<sup>50</sup>

As in the case of hunting, a native tradition of men fighting animals existed in Italy from an early date. A famous scene from the Tomb of the Augurs at Tarquinia, dating from the late sixth century BC, depicts a hooded man in combat with an animal (Fig. 1). This is commonly identified as a dog, but as Futrell points out, the long, wide tail of the animal, as well as the firm grip of its claws upon its opponent's leg, suggests that it may in fact be some sort of large feline rather than a canine. If this identification is correct, it therefore raises the possibility that the Etruscans were capturing and perhaps importing animals for their own violent entertainment long before the Romans did so.<sup>51</sup> A number of other Etruscan tombs, such as the Tomb of the Leopards, depict various exotic animals, which may also suggest that some sort of wild animal trade existed in Italy even at such an early date. Unfortunately, the evidence of such scenes cannot be pressed too far: they may in certain cases reflect Greek artistic influence rather than native Etruscan culture.<sup>52</sup> Evidence from a now-destroyed Oscan tomb-painting in Allifae, however, also suggests that *venationes* of some sort, perhaps as a funerary ritual, were staged from at least the end of the fourth century BC onwards in Italy. The painting in question depicted a combat between an unspecified number of men and a single lion.<sup>53</sup> Evidently the Samnites were importing such exotic animals even at such a relatively early date.<sup>54</sup>

Apart from possible Etruscan and Samnite antecedents, other scholars have connected the *venationes* to archaic Roman religious rituals involving the slaughter of animals: in the *Ludi Cereales* foxes were set alight in the Circus Maximus, while the *Ludi Florales* featured the hunting of hares and roe deer in the same venue.<sup>55</sup> As Kyle states, these events may have helped habituate the Romans to *venationes*, but it is questionable how much direct influence they had upon the development of arena *spectacula* involving the slaughter of hundreds of wild (and much more dangerous) animals.

Cassiodorus, writing in the sixth century, postulates another religious origin for the *venationes*. According to him, such events found their origin in the cult of Diana in Scythia, and travelled from there, via Athens, to Rome:

Such a show, ennobled by its building, but most base in its performance, was invented in honour of the goddess Scythian Diana, who rejoiced in the spilling of blood. O the error, the wretched deceit, to desire to worship her who was placated by human death! The prayers of countrymen, made in woods and groves, and dedicated to hunting, first, and by a lying fantasy, formed this three-fold goddess: they asserted that she was the Moon in heaven, the Mistress [Diana] in the woods, Proserpine among the shades...This cruel game, this bloody pleasure, this - so to speak - human bestiality was first introduced into their civic cult by the Athenians. Divine justice allowed it, so that the invention of a false religion's vanity might be degraded by a public show.<sup>56</sup>

If there is any accuracy in Cassiodorus' account, the linking of *Diana Scythica* with the goddess of the underworld Proserpina suggests that, like gladiatorial combat, 'ritual' *venationes* may have originally had the purpose of appeasing the latter goddess with blood and death, in this case the blood of animals sacred to her counterpart Diana. Although the date at which this Scythian cult of Diana was established is unclear, it was evidently an ancient one: Strabo blames the influence of this same 'barbaric' cult for the institution of the *rex nemorensis* at the temple of Diana in Aricia, itself an ancient cult of the goddess in Italy.<sup>57</sup>

A far more questionable detail of Cassiodorus' explanation of the *venationes* is his assertion that such public events were first staged by the Athenians. The institution of *venationes* in Athens earlier than those in Republican Italy is not

indicated by any other evidence, artistic or literary. Perhaps Cassiodorus is merely thinking of the early exhibitions of trained animals in Athens mentioned by Isocrates (see page 6). The *venationes* were evidently attributed to the Athenians by Cassiodorus merely as a conjecture, since the Romans in so many other areas did copy, or at least draw inspiration from, the Greeks, and from the Athenians in particular.

Apart from possible Greek and Etruscan antecedents, a more immediate factor in the development of the earliest *venationes* may have been Roman territorial expansion in the mid-Republic. Lafaye contends that the Romans may have first thought of staging public hunts, rather than mere displays of exotic animals, after the Second Punic War; as a result of Scipio Africanus' campaigns in North Africa they became familiar with the hunting of animals native to that region, and also obtained a potential source of supply for these animals destined for games in Rome and elsewhere.<sup>58</sup> Perhaps more importantly, the increased supply of animals brought about by successful warfare overseas allowed the Romans to kill large numbers in the *venationes* without having to worry unduly about obtaining more for subsequent events.

The earliest recorded *venatio* in Rome, in fact, occurred shortly after successful campaigns against the Carthaginians and Seleucids had expanded Roman influence into North Africa and Asia Minor. This spectacle, a combat involving lions and leopards, was put on by Fulvius Nobilior in 186 BC to celebrate his Aetolian triumph.<sup>59</sup> Nobilior's spectacle indeed appears to have been the very first *venatio*, as opposed to animal display, staged in the city, or at least the first such event involving lions and leopards. Livy, in describing Nobilior's games, states: *Athletarum quoque certamen tum primo Romanis spectaculo fuit et venatio data leonum et pantherarum...* Although *primo* certainly refers to the fight between the athletes, it may also be connected grammatically with the *venatio* in question, as at least one commentator on Livy has suggested.<sup>60</sup> The money spent on procuring lions and

leopards evidently made Nobilior's presentation one of the most expensive yet staged in Rome: only seven years after the event, the Senate decreed that no one was to spend more on games than Nobilior had.<sup>61</sup>

Although the animals at Nobilior's *venatio* theoretically could have come from either Africa or Asia Minor, Africa is perhaps more likely, given the Romans' much longer involvement in North Africa. Another important piece of evidence pertaining to the origin of Nobilior's animals is the short-lived senatorial ban between 186 and 170 BC on the importation of African felines, which was overturned in the latter year by the tribune Gaius Aufidius.<sup>62</sup> The original ban on African animals may have been brought about by the Senate's uneasiness at one of its members like Nobilior blatantly promoting himself amongst the masses by such a novel spectacle. It is not impossible, however, that at least some of Nobilior's animals may have come from Asia Minor. Since Livy, in describing Nobilior's spectacle, nowhere describes the animals as African, Jennison suggests that Nobilior may have arranged for his animals to be shipped to Rome from the east while he was still in Aetolia.<sup>63</sup>

The popularity of *venationes* in the early second century BC, apart from the two senatorial decrees just mentioned, is also indicated by the building of iron cages for animals in the Circus Maximus by the censors of 174 BC.<sup>64</sup> Evidently, many non-African animals were also being used in the Roman beast-hunts of the period, since the construction-work carried out in 174 BC suggests that *venationes* continued unabated during the period of the senatorial ban. The popularity of these events, even at such an early date, may also perhaps be measured by the fact that a tribune, traditionally the people's champion, was responsible for rescinding the ban. The contemporary poet Terence, echoed by Horace at a later date, indeed complained that the gladiatorial and venatorial *munera* were becoming more popular in Rome than conventional theatre.<sup>65</sup>

Very little information is preserved about the games, including animals, that Aemilius Paullus sponsored in 168 BC to celebrate his victory over Macedonia, but they may well have achieved new levels of violence.<sup>66</sup> Paullus, as part of his programme, is said to have condemned deserters to beasts, including elephants, the first recorded Roman to do so.<sup>67</sup> Polybius explicitly states that the spectacle in 166 BC staged by Antiochus IV (175-c.164 BC) in Daphne was done in an attempt to surpass that of Paullus. Since Antiochus' event included a *venatio* as well as gladiatorial combat, one can perhaps assume that Paullus' did as well.<sup>68</sup>

Subsequent *venationes* featured new types of animal combat. In 104 BC the aediles Scaevola and Crassus staged the first fight of multiple lions in Rome, while the first combat involving elephants in Rome was given only a few years later, in 99 BC, by the aedile Gaius Claudius Pulcher. Sulla, in 93 BC, was the first Roman to stage a combat of maned lions, a gift given to him by King Bocchus of Mauretania (c.105-c.81 BC). Seneca comments that this spectacle was the first occasion on which exhibited lions were not actually chained together, perhaps an indication of the Romans' increasing confidence in handling these animals.<sup>69</sup>

In 78 BC, possibly the first fight between elephants and bulls was staged by the aediles Lucius and Marcus Lucullus. In 61 BC the aedile Lucius Domitius Ahenobarbus included 100 Numidian bears, as well as 100 *venatores*, in his spectacle. Three years later the aedile Marcus Scaurus displayed a hippopotamus, 5 crocodiles, and 150 leopards: the latter animals probably came from Syria, where Scaurus had served from 65 to 59 BC. In 55 BC Pompey put on a *venatio* involving approximately 20 elephants, 410 leopards, 500 or 600 lions, and a number of other animals including apes and a rhinoceros. Julius Caesar included 400 lions, Thessalian bulls, elephants, and a giraffe for the first time in the games staged to celebrate his quadruple triumph of 46 BC.<sup>70</sup>

Although the ancient accounts of Caesar's spectacle do not agree in specifics, a combat was evidently staged in the Circus Maximus involving forty elephants, at least

500 infantry, and a number of cavalry.<sup>71</sup> None of these sources specifies how many, if any, of the elephants were killed in this event, but it is unlikely to have been a large number: at least some of these forty elephants were likely part of the force of war-elephants which defected from Antony to Octavian in 44 BC.<sup>72</sup> It is highly unlikely that Caesar, having seen the outrage Pompey's slaughter of elephants had provoked amongst the Roman populace a few years earlier, would risk similar anger against himself by allowing the destruction of the elephants used in his spectacle.

The rising popularity of bloody gladiatorial combat in the 2<sup>nd</sup> and 1<sup>st</sup> centuries BC was likely an important factor in the gradual introduction of bloodshed into what had originally been mere processions of exotic animals.<sup>73</sup> Kyle has argued that the original impetus for large and violent gladiatorial games may have been the Roman defeat at Cannae in 216 BC, after which the 'insecure' Romans needed to see their enemies, as represented by gladiators, slaughtered on a previously unmatched scale.<sup>74</sup> Contemporary animal displays likely appeared tame by comparison, which may have prompted the organizers of such events to increase their violent content as well. A final factor in the rising bloodshed of the *venationes* may have been the demographic shift to urbanism in Italy after the Second Punic War; city-dwellers who no longer hunted in the wild may have found the staged hunts in Rome particularly entertaining.<sup>75</sup>

As Roman power and influence expanded in the Republican period throughout the Mediterranean, the popularity of beast-hunts quickly spread among foreign nations and peoples as well. The spectacle staged by Antiochus IV in Antioch suggests the popularity of *venationes* amongst non-Romans even as early as the second century BC. The event included Greek elements like the πομπή of soldiers and elephants, but Polybius states that it also included thirty days of gladiatorial games and beast-hunts. Although the immediate inspiration for these games may well have been the *venationes* staged by the Romans in 169 and 168 BC, Antiochus was also undoubtedly influenced by the time he had earlier spent as a hostage in Rome, where



he would have witnessed a number of gladiatorial games and animal *spectacula*. Interestingly enough, Antiochus evidently considered that the *venationes*, and for that matter the gladiators, would also be popular amongst his Greek subjects: indeed, the Greek historian Polybius, while censuring other aspects of Antiochus' spectacle, merely notes the gladiatorial combat and *venationes* without any associated criticism.<sup>76</sup>

#### *Animal Spectacula as Propaganda:*

At many late Republican *spectacula* the particular animals at a given event were chosen to advertise the expansion of Roman influence into, or outright control of, a particular region, normally under the auspices of the very magistrate giving the show. Such a tendency in 'animal selection' can also be witnessed in the *spectacula* staged by subsequent emperors. An early example of this practice was the show put on by Scaurus in 58 BC, at a time when Rome was increasingly becoming involved in the politics of Ptolemaic Egypt: the featured participants were five crocodiles and the first ever hippopotamus seen in Rome. Shortly thereafter, in 55 BC, Pompey exhibited the first Ethiopian apes and the first rhinoceros seen in Rome, in order to advertise his influence in Africa and the East. The Gallic lynx seen in Rome for the first time at this same spectacle may well have been provided by his ally Caesar to advertise his own achievements in a different theatre of war: in 46 BC Caesar exhibited a giraffe at his triumph as a mark of his own successes in Egypt.<sup>77</sup>

Sometimes particular events could be staged to serve these same propaganda purposes: Thessalian bull-fighting was introduced to Rome as part of Caesar's *spectaculum* in 46 BC.<sup>78</sup> As Jennison notes, this undoubtedly had something to do with the fact that Caesar's decisive victory over Pompey had occurred at Pharsalus in Thessaly only a few years earlier. The Thessalians had perhaps sent their bull-fighters to Rome out of gratitude for the privileges Caesar had granted them after the

battle, but it appears more likely that Caesar had requisitioned these specialists for his triumphal games in Rome to remind the Roman populace of his exploits in that region.<sup>79</sup>

*The Organization of Republican Animal Spectacula:*

While most of the specific animal *spectacula* just discussed were all staged on special occasions by triumphant Roman generals, Plautus' *Poenulus* confirms that aediles in Rome were also given responsibility for such events from as early as the 3<sup>rd</sup> century BC, a practice maintained in the last century of the Republic. Apart from the exceptional *venationes* of individuals like Pompey and Caesar, other such *spectacula* were normally staged by either the curule aediles or, on occasion, the urban praetor. *Spectacula* were incorporated into games such as the *ludi Romani*, which were already organized by these officials, although they were only staged after the 'sacred' portion of such *ludi* had been completed. Although the aediles were provided with money from the *aerarium* for these events, they could, and quite often did, supplement this fund with their own wealth, in order to gain the personal popularity accruing from a large-scale *venatio* or animal display.<sup>80</sup>

Unfortunately, not much information survives concerning the organization of Republican animal *spectacula*: the majority of evidence comes from inscriptions detailing the careers of later imperial officials involved with these games in varying capacities. The *venationes* and displays of the later Republic appear to have been relatively 'impromptu' affairs, with little of the infrastructure behind the subsequent imperial *spectacula*. Although Italian merchants in Africa may have occasionally shipped exotic animals back to Rome as early as the period of the Jugurthine war, the wildlife exhibited by Republican magistrates was evidently supplied predominantly by their powerful 'contacts' overseas as need required, rather than by any established and regular exporters of animals. King Massinissa of

Numidia (203-148 BC) may have supplied many of the animals used in early Roman *spectacula*, while Sulla was later supplied with 100 lions for his *venatio* in Rome by his ally King Bocchus of Mauretania (c.105-c.81 BC).<sup>81</sup>

As we have seen, Republican *spectacula* subsequent to that of Nobilior came to involve more and more animals of different types, in more and more violent events, culminating in the elaborate events put on by Caesar and Pompey. It should be noted, however, that at least some of the *spectacula* of the late Republic do appear to have included only easily-obtainable animals native to Italy, alongside those featuring far more exotic beasts. In a passage written in about 36 BC, Varro compares the variety of native Italian animals in a private *vivarium* to the variety of animals to be seen in aediles' *venationes* staged without African animals, thereby implying that such events were not at all uncommon (see page 12).<sup>82</sup>

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Notes:

<sup>1</sup> Isocrates, *Antidosis*, 213.

<sup>2</sup> Jennison (1937) 3: for the date of this procession, see Coleman (1996) 49-50. Although it is unclear how many Romans personally witnessed Ptolemy's spectacle, they regardless would have been in a position to collect information about it soon afterwards. In 273, the Romans sent an embassy to Ptolemy, and the latter may have sent his own ambassadors to Rome as early as that year: see Green (1990) 177, 370.

<sup>3</sup> Jennison (1937) 30.

<sup>4</sup> For a detailed discussion of this procession see Jennison (1937) 30-35.

<sup>5</sup> For the introduction of Thessalian bull-fighting in Rome, see Pliny, *NH*, 8, 70.

<sup>6</sup> Theocritus 2, 66-68: Jennison (1937) 24.

<sup>7</sup> Pausanias 7, 18, 7-13.

<sup>8</sup> Jennison (1937) 25-26.

<sup>9</sup> Burkert (1985) 62-63.

<sup>10</sup> Loisel (1912) 65, 91: For the tamed lions employed by priests of Cybele, see St. Augustine, *Civitas Dei*, 7, 24.

<sup>11</sup> Loisel (1912) 90-91.

<sup>12</sup> Pliny, *NH*, 8, 6: Seneca, *De Brevitate Vitae*, 13, 3: Pearson (1973) 118: Toynbee (1996) 34. Although Coleman (1996) [51-52] plausibly suggests that in general Roman triumphal processions of captured animals may well have been inspired by Ptolemy II's animal procession in Alexandria representing Dionysus' Indian triumph, this was likely not so in the case of Dentatus' triumph. As stated previously, Ptolemy's procession, at the earliest, took place in the winter of 275, which means that word of it could not possibly have reached Rome prior to Dentatus' spectacle. Word of Ptolemy's preparations for his procession, however, which undoubtedly began long before the actual event, may well have reached Rome even prior to 275, and perhaps thereby played some role in inspiring Dentatus' exhibition.

- <sup>13</sup> Plautus, *Persa* 189-99; *Poenulus* 1011-12: Bertrand (1987) 211-212. For the derivation of the ostrich's name in Latin or Greek from the word for sparrow, see Toynbee (1996) 237-38.
- <sup>14</sup> Pliny, *NH*, 8, 7; 20.
- <sup>15</sup> Livy 44, 18, 8.
- <sup>16</sup> *Poenulus*, 1011-12.
- <sup>17</sup> Jennison (1937) 45: Epidicus, variously dated to 196 or 190 B.C., also mentions *pantherinum* genus in his work: see Aymard (1951) 75, n. 5.
- <sup>18</sup> Livy 44, 18, 8: *Res Gestae* 22: Jennison (1937) 45.
- <sup>19</sup> Pliny, *NH*, 8, 24: Jennison (1937) 46.
- <sup>20</sup> Such enclosures, commonly known as *vivaria*, varying widely in size, basically consisted of a fenced-in area of parkland or forest containing various wild animals, which could be used by the owner for hunting and/or breeding purposes.
- <sup>21</sup> Varro, *De Re Rustica* 3, 3: Pliny, *NH*, 8, 78: Bertrand (1987) 213: Orth (1914) 562-63.
- <sup>22</sup> Aulus Gellius, *Atticae Noctes*, 2, 20: Jennison (1937) 133-34.
- <sup>23</sup> Aymard (1951) 71-73. These *vivaria* should be distinguished from the animal-enclosures maintained by the imperial Roman army, which were primarily designed as 'holding areas' for exotic animals before they were shipped off to their ultimate destination.
- <sup>24</sup> Varro, *De Re Rustica*, 3, 12: Jennison (1937) 133, n. 1.
- <sup>25</sup> Pliny, *NH*, 8, 78; 9, 82: Varro, *De Re Rustica*, 3, 12: Jennison (1937) 135.
- <sup>26</sup> Varro, *De Re Rustica*, 3, 13: Jennison (1937) 135.
- <sup>27</sup> Jennison (1937) 135-36.
- <sup>28</sup> Columella, *De Re Rustica*, 9, 1.
- <sup>29</sup> Varro, *De Re Rustica*, 3, 12: Jennison (1937) 136.
- <sup>30</sup> Toynbee (1996) 16: Aymard (1951) 54-55.
- <sup>31</sup> Jennison (1937) 35: As Coleman (1996) [56] notes, this animal preserve may have been built in imitation of those possessed by the Seleucids, such as that enjoyed by Demetrios Poliorcetes while being held under 'house arrest' by Seleucus I: See Aymard (1951) 47-48.
- <sup>32</sup> Athenaeus 14, 654b.
- <sup>33</sup> Strabo 16, 4, 15. However, since the second horn of the white rhino is negligible in size, it is possible that Artemidorus saw one of these animals rather than their Indian counterpart: see Gowers (1950) 64.
- <sup>34</sup> Pliny, *NH*, 8, 27: Dio 51, 22, 5: Jennison (1937) 30.
- <sup>35</sup> Philo, *De Decem Oraculis*, 23: Galen, *Therapeutics for Glaucan*, 2, 12: Scarborough (1985) 128-29: Jennison (1937) 167-68.
- <sup>36</sup> Toynbee (1996) 16: Aymard (1951) 54-55: Anderson (1985) 85. Hellenistic enclosure were themselves undoubtedly based upon early Persian *paradeiso*i first encountered by Alexander: see Lane Fox (1996) 141-42; Anderson (1985) 78-79.
- <sup>37</sup> Strabo 12, 3, 30: Lucan, *De Dea Syria*, 41: Jennison (1937) 134. This Syrian city was more commonly called Hierapolis, but I have used the alternative name of Hieropolis in order to distinguish it from the Phrygian town of Hierapolis, also mentioned in the thesis.
- <sup>38</sup> Jennison (1937) 5: Lane Fox (1996) 146.
- <sup>39</sup> Varro, *De Re Rustica*, 3, 13, 2-3: Pliny, *NH*, 8, 78: Coleman (1990) 67: Wiedemann (1995a).66-67.
- <sup>40</sup> Toynbee (1996) 37, 47.
- <sup>41</sup> Polyaeus 8, 23, 5: Suetonius, *Julius*, 37, 2: Dio 43, 22, 1: Jennison (1937) 58.
- <sup>42</sup> Columella, *De Re Rustica*, 9, 1: Jennison (1937) 136.
- <sup>43</sup> A copy of a wall painting from the Tomb of the Nasonii near Rome gives an idea of what Roman animal-enclosures may have looked like in the imperial period. The panel in question shows a wedge-shaped enclosure containing what appear to be two

deer pursued by a dog. The latticework fence, which includes an enclosed walkway on one side, appears to be made of wood: see Messineo (2000) 65, fig. 66.

Unfortunately, the paintings from the Tomb of the Nasonii discussed in this dissertation only exist now in the form of copies made after the tomb's discovery in the seventeenth century. The original paintings dated to the second century AD: see Messineo (2000) 7-10.

<sup>44</sup> Kyle (1998) 188-89.

<sup>45</sup> Aymard (1951) 60; Cartmill (1993) 42; Anderson (1985) 83.

<sup>46</sup> Aymard (1951) 54-56; Anderson (1985) 84-85.

<sup>47</sup> Plutarch, *Aemilius Paullus*, 6, 5; Lane Fox (1996) 146.

<sup>48</sup> Orth (1914) 562.

<sup>49</sup> Sallust, *Bellum Catilinae*, 4, 1; Varro, *Sat. Men.*, 161, 293-96, 361; Cartmill (1993) 42; Anderson (1985) 86-87.

<sup>50</sup> *CT* 15,11,1; Pharr (1969) 436; Orth (1914) 563-64.

<sup>51</sup> Futrell (1997) 15-16; 233, n. 28. This hypothesis naturally depends upon whether or not the depicted feline belonged to a species native to Italy in the Etruscan period.

<sup>52</sup> Strong (1968) 121-23; for the Tomb of the Leopards, see e.g. Blanck and Weber-Lehmann (1987) 125-28.

<sup>53</sup> Weege (1909) 135. Unfortunately, to my knowledge, no photographs or drawings of this painting were made before its destruction.

<sup>54</sup> It should be noted that other, even more distant, territories may have been importing African animals as early as the fourth century B.C. A skull of a Barbary ape found at the Irish site of Navan has been carbon-dated to between 390 and 20 B.C.: see Raftery (1994) 79.

<sup>55</sup> Kyle (1998) 42-43; Beacham (1999) 11-12.

<sup>56</sup> Cassiodorus, *Variae*, 5, 42, 2-4; Loisel (1912) 92; Barnish (1992) 91. It should be noted that Cassiodorus is speaking here of contemporary *venationes*, which as we shall see, were apparently more dangerous to the human than to the animal participants.

<sup>57</sup> Strabo 5, 3, 12; For the relative antiquity of the cult of Diana at Aricia, see Beard, North, and Price (1998) Vol. 2; 15.

<sup>58</sup> Lafaye (1963) 700; Ville suggests that the idea itself of hunting as a spectator sport may have originally come from Africa as well, although given both the Hellenistic and Roman precedents for animal-display and the like, this theory is not overly convincing. As Ville notes, a certain Hanno the Carthaginian is said (Pliny, *NH*, 8, 21) to have been the first individual to exhibit a tamed lion, but unfortunately Pliny does not specify his date: see Ville (1981) 53.

<sup>59</sup> Livy 39, 22, 2. In the following section I am concentrating on Republican spectacles in which the specific animal participants have been recorded by the ancient sources: for a fuller listing of Republican *venationes*, see Ville (1981) 51-72, 88-99.

<sup>60</sup> Weissenborn and Müller (1965) Vol. 9; 44, n. 2; For a contrary view, see Aymard (1951) 75, n. 1.

<sup>61</sup> Livy 40, 44, 8-12; Beacham (1999) 12.

<sup>62</sup> Pliny, *NH*, 8, 24; Bertrand (1987) 212.

<sup>63</sup> Jennison (1937) 47.

<sup>64</sup> Livy 41, 27, 6. Animal displays, such as that Nasica and Lentulus in 169 BC, also continued in this period, but from Nobilior's beast-hunt onwards, *venationes* became the most popular animal event among the Romans.

<sup>65</sup> Terence, *Hecyra*, 25-33; Horace, *Epistulae*, 2, 1, 184-86; Scobie (1988) 192-93.

<sup>66</sup> For specific details of Paullus' games, see Edmondson (1999) 78-80.

<sup>67</sup> Edmondson (1999) 79; Livy, *Periochae*, 51, 22-24; Valerius Maximus 2, 7, 13-14.

<sup>68</sup> Polybius 30, 25-26. For the details of Antiochus' spectacle, see Edmondson (1999) 84-88. Edmondson [(1999) 80], however, does not think that Paullus' games in Greece included *venationes*.

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<sup>69</sup> Pliny, *NH*, 8, 7; 20: Seneca, *De Brevitate Vitae*, 13, 6: Athenaeus 5, 194C: Toynbee (1996) 17-18, 345, n. 10.

<sup>70</sup> Pliny, *NH*, 8, 2; 20; 24; 28-29; 40; 54; 70: Dio, 39, 38, 2-5; 43, 22, 23: Cicero, *Ad Fam.* 7, 1, 3: Suetonius, *Julius*, 37, 2: Jennison (1937) 50-51: Coleman (1996) 61-62. The exact date of the first combat between elephants and bulls is uncertain: Pliny, citing Fenestella, states that the first such confrontation took place in 78 B.C., while the later historian Granius Licinianus [36] dates it to 99 B.C. [see Ville (1981) 89]. Since Pliny was more contemporary with the events he describes, it is perhaps preferable to take his evidence over that of Licinianus.

<sup>71</sup> Pliny, *NH*, 8, 7: Suetonius, *Julius*, 39, 3: Appian, *Bellum Civile*, 2, 102: Dio 43, 23, 3.

<sup>72</sup> Cicero, *Philippics*, 5, 17, 46: Dio 45, 13, 4: Jennison (1937) 57-58.

<sup>73</sup> Jennison (1937) 3, 41-42: Aymard (1951) 77-79: for a brief list of ancient Roman festivals and sacrifices involving the slaughter of common animals such as dogs and fish, see Kyle (1995) 194-95.

<sup>74</sup> Kyle (1998) 47-48.

<sup>75</sup> Kyle (1998) 63, n. 56.

<sup>76</sup> Polybius 30, 25-26: Edmondson (1999) 87-88: Jennison (1937): 2-3.

<sup>77</sup> Merten (1991) 140-42: Ville (1981) 348, n. 10: Shelton (1999) 245-46, 249-50.

<sup>78</sup> Pliny, *NH*, 8, 70.

<sup>79</sup> Jennison (1937) 59.

<sup>80</sup> Ville (1981) 94-95, 97-99: Shelton (1999) 233-34.

<sup>81</sup> Sallust, *Bell. Jug.* 21, 2; 26, 1: Livy, 39, 22; 44, 18: Bertrand (1987) 228: Pliny, *NH*, 8, 20: Seneca, *De Brevitate Vitae*, 13, 6: Frank (1959) Vol. 4; 17, 21; Vol. 1; 203.

<sup>82</sup> Varro, *De Re Rustica*, 3, 13: Jennison (1937) 43.

### Late Republican and Imperial Animal Spectacula

By the 1<sup>st</sup> century BC, Roman citizens evidently expected as a matter of course that politicians with foreign contacts would requisition exotic creatures for various *spectacula*. Sulla, upon losing his first campaign for the praetorship, claimed the only reason for this setback was that the people of Rome wanted him to serve first as aedile, so that he could provide them with splendid *venationes* and combats of African animals through his friend Bocchus.<sup>1</sup> At a slightly later date, Quintus Gallius staged a gladiatorial show in Rome to compensate the populace for a *venatio* which, lacking animals, he had failed to put on during his aedileship in 67 BC.<sup>2</sup> It is important, however, to note that animal *spectacula* at this time had evidently not yet become a formalized part of the Roman games, unlike gladiatorial combat. Vatinius attempted to defend the illegal games put on during his candidacy for the praetorship in 55 BC by claiming that he had only employed *bestiarii* (animal fighters), performers who were not subject to the law banning the formal exhibition of gladiators during one's candidacy for public office.<sup>3</sup>

#### *The Requisition of Animals:*

A variety of means existed in the late Republic to supply the animal *spectacula* staged by Sulla and other politicians. Autocrats like Pompey or Caesar probably exacted at least the majority of the wildlife used in their *spectacula* as tribute from states subject to Rome or from conquered foes.<sup>4</sup> The variety and number of animals used by Pompey in 55 BC reflected his wide-spread political contacts throughout the Mediterranean basin, thanks to his campaigns in the east and his 'sponsorship' of African kings like Ptolemy Auletes in Egypt.<sup>5</sup> It may also have been Pompey, the first Roman to involve himself seriously in the affairs of ancient Palestine, who first requisitioned exotic animals from the region, although direct evidence is lacking.

One of the prime pieces of indirect evidence is a dictate from the fourth *Seder* of the *Mishna*, a Jewish legal code edited at the end of the second century AD. The edict in question forbids Jews from selling lions, bears, and other potentially harmful animals to the heathen.<sup>6</sup> Since this problem was thought serious enough to require a law preventing it, the trade in animals from Palestine had probably been going on for some time, perhaps as early as the time of Pompey.<sup>7</sup>

Caesar, like Pompey, also appears to have had his own men working overseas to procure wildlife for his *spectacula*: one of Caesar's opponents in the civil war, Lucius Caesar, is said to have murdered several of the former's slaves, freedmen, and exotic animals. Suetonius does not specify where this slaughter took place, but it probably occurred in North Africa, where Lucius Caesar was active between 49 and 46 BC.<sup>8</sup> Caesar, like later emperors, may well have given some of his slaves and freedmen the specific responsibility of obtaining and looking after exotic creatures for his *spectacula* in various locales.

As animal displays and *venationes*, like the gladiatorial games, became subject to increasing organization in the late Republic, the supplying of animals, often a quite difficult task, became the responsibility of the magistrates putting on a particular show. In a relatively well-known example, the aedile candidate Marcus Caelius Rufus, responsible for producing a *venatio* in Rome if elected, wrote a series of letters to Cicero requesting a supply of leopards when the latter was governor of Cilicia in 51 BC.<sup>9</sup> By September of 51 BC, Caelius had obtained twenty African leopards from Gaius Curio, who was collecting his own animals for the tribunician games of 50 BC.<sup>10</sup> In order to obtain his Cilician leopards, Caelius urged Cicero to pressure the inhabitants of Cibyra, a city in his province, to provide the animals. In addition, Caelius asked Cicero to contact Pamphylia in this regard, even offering to send some additional men to Cilicia to supervise the transport of the leopards should Cicero's enquiries and commands prove particularly successful.<sup>11</sup> This series of letters began well over a year before Caelius in fact had to stage his aedilician games, presumably



at the *Ludi Romani* in September of 50 BC, indicating how slow and precarious the transport of exotic animals to Rome could be.<sup>12</sup>

Cicero's letters show how at this time there appear to have been no legal guidelines for the shipment of animals: such arrangements were evidently left up to the discretion of individual governors. Cicero himself refused to exact money from the Cilicians for the expenses of Caelius' show, and merely issued a mandate for professional hunters to capture the leopards.<sup>13</sup> In other cases governors may well have exacted funds from their provincials to pay for such *spectacula*, yet another possible instance of governmental corruption in the late Republic. Cicero's reluctance to order his provincials to round up leopards as Rufus requested, rather than merely provide a commission for their capture, may well have been unusual behaviour for a Roman governor of Cicero's day.<sup>14</sup>

An interesting figure appearing in a few of Cicero's letters concerning the Cilician leopards is the Roman equestrian Patiscus. In a letter dated to September of 51 BC, Caelius informs Cicero that this individual had already supplied Curio with ten leopards for the latter's games.<sup>15</sup> A subsequent letter written in April of 50 BC throws more light on the activities of Patiscus. At this time, according to Cicero, 'professional hunters' (*qui venari solent*) and Patiscus were both in the process of attempting to capture Caelius' leopards, possibly even going so far as to leave Cilicia, because of the apparent scarcity of such animals in that province.<sup>16</sup>

Although the letter is not explicit, Patiscus, since he had previous experience in capturing leopards for Curio, may well have been in charge of the group of hunters mentioned by Cicero. In all likelihood entrepreneurs like him were active throughout Roman territory in the late Republic, gathering various animals for their clients' spectacles.<sup>17</sup> Curio, mentioned above in connection with Caelius Rufus, evidently had an effective network of such individuals in his employ, to judge by the fact that he gave the extravagant gift of twenty leopards to Caelius for his expected aedilician games, *...ne putes illum [Curio] tantum praedia rustica dare scire*.<sup>18</sup>

*The Organization of Animal Spectacula:*

The growing popularity and importance of animal displays and *venationes* can be measured by administrative changes made in the late Republic to facilitate their production. As we have seen, early animal *spectacula* were staged irregularly on special occasions, such as the triumphal celebrations of Roman generals, but in 44 BC the *munera* as a whole (spectacles including both gladiatorial and animal events) were incorporated into the preexisting public games by the Senate. Only two years later, the aediles substituted the *munera* for chariot races at the festival of Ceres.<sup>19</sup> Higher officials also began to stage animal *spectacula* in this period, no doubt because of the increasing prestige attached to the latter: coinage issued in 42 BC by Lucius Regulus commemorated the *venationes* staged during his praetorship.<sup>20</sup>

After the fall of the Republic, animal *spectacula*, as well as their gladiatorial counterparts, were gradually brought under imperial control and organization. These events, which under the Republic had been staged on occasions like triumphs, or appended to the traditional Roman *ludi*, were linked with the regularly-scheduled gladiatorial games by Augustus. The *munera* as a whole, beginning in his reign, began to be held during the Quinquatrus and Saturnalia at Rome. Beginning in 20 BC, beast-hunts, under the jurisdiction of the praetors, were also amongst the events staged to celebrate the birthday of the emperor each year.<sup>21</sup>

The important innovation of staging animal *spectacula* on the same day as gladiatorial combat appears to have occurred first in AD 6: the games of that year dedicated by Germanicus and Claudius to their deceased father Drusus included gladiatorial games associated with a display of trained elephants. A passage from Ovid's *Metamorphoses* (...*matutina cervus periturus arena...*) suggests that the staging of *venationes* in the morning, which subsequently became the regular pattern, in connection with afternoon gladiatorial games, was also current during the reign of Augustus.<sup>22</sup> The integration of gladiatorial and animal *spectacula* in

general appears to have become the norm by at least the end of the Julio-Claudian dynasty: the latter events were no longer associated with the traditional Roman *ludi* after the reign of Vespasian.<sup>23</sup> The merging of animal and gladiatorial events appears to have progressed at a similar pace outside of Rome: by at least the end of the first century, both types of spectacle were "...sur un pied d'égalité...".<sup>24</sup>

Despite the increasing integration of animal *spectacula* into the regular Roman games, emperors such as Augustus, like earlier Republican generals and magistrates, would sometimes sponsor such events independent of gladiatorial combat, an indication of how they continued to be popular events in their own right under the empire.<sup>25</sup> At least two of Augustus' successors, Caligula and Claudius, staged *venationes* of *Africanae bestiae* in the circus to provide relief from the monotony of hours of chariot-races: the latter emperor is said to have staged such a *venatio* after every fifth race.<sup>26</sup>

Augustus realized that in Rome itself, the staging of *munera* including *venationes* and animal displays, a powerful method of currying favour with the Roman populace, had to be ultimately under the emperor's control, rather than remain in the hands of ambitious senators or wealthy citizens. In the 20's BC the praetors were restricted to only two *munera* per year. Further limitations were put on non-imperial *munera* by Tiberius.<sup>27</sup> By the reign of Domitian no games could be staged in Rome unless by the emperor or one of his officials.<sup>28</sup> This organization lasted until the third century when the *munera*, like other important activities, were brought under even tighter imperial control.<sup>29</sup>

Despite strict imperial control over the production of spectacles in Rome, however, it is important to note that *munera* staged by various officials (with imperial permission) did not by any means disappear from the city. Especially during the early empire, when Republican traditions were still within living memory, the games, under imperial patronage, continued to be produced in the name of the various magistrates. In 25 BC, 300 bears and 300 other African animals, all of which

were killed, were exhibited by the praetor Publius Servilius.<sup>30</sup> In addition, we hear of the *quindecimviri* producing a *venatio* as part of the Secular Games of 17 BC, while in AD 39 the praetors were forced by Caligula to put on a *venatio* as their predecessors had in the Republican and Augustan period. In 41, this obligation, as well as that of staging a gladiatorial *munus*, was lifted from the praetors by Claudius.<sup>31</sup> Instead, by a law of 47, Claudius made the quaestors responsible for putting on *munera* 10 days every December rather than continue their previous duty of paving roads, an arrangement which continued at least into the fourth century.<sup>32</sup>

Apart from regular events staged each year under the emperor's auspices, various spectacles were also put on periodically by officials and individuals in Rome. *Munera* are known to have been staged by the consuls over the first two centuries AD, but it is unclear whether they, like the quaestors' games, were held annually. Games, including animal *spectacula*, continued to be held occasionally by magistrates or members of priestly colleges to celebrate a new office, as well by members of other *collegia*.<sup>33</sup> Curule aediles often staged such *munera*, and were legally responsible for damages caused by wild animals en route to the games.<sup>34</sup> Even private citizens with imperial permission could evidently still stage their own *munera* in Rome as late as Symmachus' lifetime. Patrons who received imperial permission to stage *munera* had to use the services of a *lanista* who supplied them with the necessary number of gladiators and/or animals for their games.<sup>35</sup>

#### *The Personnel of Animal Spectacula:*

As the *venationes* and animal displays became more formalized in the imperial period, an elaborate infrastructure of officials was gradually instituted to ensure that all of the important aspects of these spectacles ran smoothly. The duties of these men ranged from supervising *venatores* in Rome itself to training the animals involved in the spectacles. A number of freedmen and individuals of lower status were also

involved with the more mundane aspects of animal *spectacula*, such as providing medical treatments to the participants.

One of the earliest-known imperial officials associated with the *venationes* is the unfortunate *curator munerum ac venationum* attested for the reign of Caligula. The distinction between *munera* and beast-hunts in this individual's title suggests that *venationes* had not yet been fully incorporated into the regular games.<sup>36</sup> Perhaps at this relatively early date *venationes* were staged on their own more often than in the later Empire, when such spectacles were staged without gladiatorial combat only rarely.<sup>37</sup> Some scholars, because of the existence of this *curator venationum* during the reign of Caligula, have suggested that the *Ludus Matutinus* ('Morning School'), the training-school for the *venatores* in Rome, may also have originally been built around this time.<sup>38</sup> Others have suggested that the training-schools in Rome were instituted as early as the reign of Augustus, in keeping with this emperor's reorganization of the games during his reign.<sup>39</sup>

The Flavian emperors added a new degree of organization and control to the imperial *venationes*, at the time when the Colosseum and the *Ludus Magnus* were being built. Many of the equestrian officials assigned to supervise various aspects of the *venationes* appear to belong to the Flavian period.<sup>40</sup> Although, as noted above, it has been suggested that Caligula was responsible for the construction of the *Ludus Matutinus* on the Caelian, it is more likely to have been built during the reign of Domitian (81-96): Flavian brick-stamps were in fact found in the excavated portion of the building (Fig. 2).<sup>41</sup> In addition, the earliest epigraphically-attested *procurator Ludi Matutini* dates to the reign of Trajan.<sup>42</sup> This position, as noted, evidently entailed supervision over the venatorial training school in Rome, much as the *procurator Ludi Magni* supervised the main gladiatorial school in the city.<sup>43</sup> The importance of the *venationes* relative to gladiatorial combat in ancient Rome may perhaps be measured by the fact that the *Ludus Matutinus*, measuring approximately 32 by 21 metres in size, was about half the size of the nearby *Ludus Magnus*.<sup>44</sup>

The *Ludus Matutinus* was used to train not only the *venatores*, but the animals as well. Contrary to popular opinion, a wild animal will not generally attack even an early Christian if not trained beforehand to do so. According to Jennison, a Pompeiian fresco may illustrate one of the training methods used in such facilities. The scene in question depicts a leopard, bound to a bull, attacking a man in front. The binding of the two animals together would allow the *venator* fighting the leopard to withdraw in relative safety should the combat turn against him.<sup>45</sup>

A number of inscriptions identify persons associated with the *Ludus Matutinus*. A third-century Greek inscription found in Rome lists an unnamed official, apparently from Alexandria, as having served as ἐπίτροπον Λούδου ΜΑΤΟΥΤΕΪΝΟΥ in addition to his other offices, such as the procuratorship of Noricum and Macedonia, and the procurate of the λούδοι of Asia. Although it is not absolutely clear whether or not the 'schools of Asia' refer to gladiatorial or venatorial schools, the former is more likely, since we know from elsewhere of the existence of such gladiatorial facilities in Asia. The various offices suggest that the procurate of the *Ludus Matutinus* was considered a position of no small importance, to be entrusted only to officials of some administrative experience.<sup>46</sup> One might suppose that the unnamed Greek official perhaps had some previous experience with the animal trade in Alexandria, since many of the exotic animals exported from Africa to Rome for the *venationes* or animal displays passed through Egypt en route.<sup>47</sup>

The *procurator Ludi Matutini*, however, appears to have held a lesser rank than the official in charge of the *Ludus Magnus*, who in all the cases we know of held more important positions throughout his career. In all known cases, the *procurator Ludi Magni*, who received a salary of 200,000 sesterces per year, had previously been a member of the prestigious Praetorian Guard, while in the case of the inscription just cited, the *Ludus Matutinus* was entrusted to a Greek from Alexandria with no such military experience. In addition, the post of *procurator Ludi Matutini* probably only carried an annual salary of 60,000 or 100,000 sesterces.<sup>48</sup>

An Ostian inscription of 220-224 AD sheds some light on the relative importance of the post of *procurator Ludi Matutini*. The inscription records the career of Publius Bassilius Crescens, who started his career with the tribunate of the first German cohort, possibly stationed in Cappadocia, through the procuratorship of the *Ludus Matutinus* to the procuratorship of the *annona Augusti Ostis*.<sup>49</sup> One notes how early in his career Crescens obtained control of the *Ludus Matutinus*, apparently going directly from command of an auxiliary cohort to command of the major venatorial school in the empire. Perhaps Crescens and his cohort had some previous experience with the animal-trade while in Asia Minor.

Another inscription from Taormina in Sicily records a former *procurator Ludi Matutini* and *ducenarius Ludi Magni* as *procurator familiarum gladiatoriarum* in Sicily, Aemilia, and Dalmatia, thereby showing that the same equestrian official could supervise both the gladiatorial games and *venationes* at different stages in his career.<sup>50</sup> An inscription from Palestrina, dating to approximately 180, suggests that it was perhaps not at all unusual for the same official, in this case a certain Titus Flavius Stephanus, to hold the procuratorship of the *Ludus Matutinus* as well as the *Ludus Magnus*. Stephanus may have held the former post in c. 165 and the latter in c. 170.<sup>51</sup>

A late first or early second century inscription from Corsica also sheds light on the infrastructure of the *venationes*. Besides mentioning a local *familia venatoria* ('beast-hunt association'), the text records an equestrian official as *procurator Ludi Matutini et bestiarum [Africanarum?]*. The Corsican *ludus bestiarum* implied by this inscription may have served as a counterpart for one located in Rome itself: Seneca indicates that the latter facility existed as early as the reign of Nero. According to Buonocore, the *ludus* in Corsica may have supplied animals to other areas through the *familia venatoria* mentioned in the inscription.<sup>52</sup>

In the Greek east *venationes* were evidently as popular as in the western provinces and, as in the latter area, were usually staged in conjunction with

gladiatorial contests. Numerous eastern inscriptions record such dual spectator events, normally staged by the priest of the imperial cult within a given city.<sup>53</sup> As a result of the popularity of beast-hunts in the region, several terms for the lesser officials involved with these contests also survive in Greek inscriptions.

A number of texts record individuals involved in training the animals used in eastern spectacles. Two inscriptions record *θηροτρόφοι* from Heirapolis and Akmonia, who evidently trained and looked after the wild animals in their enclosures when they were not appearing in the arena. A third *θηροτρόφος* from Bithynia is mentioned in the Life of St. Auxentius.<sup>54</sup> One may think of these men as the approximate equivalent of the *adiutores ad feras* recorded in inscriptions from the western empire.<sup>55</sup>

Some additional information about the Heirapolis and Akmonia *θηροτρόφοι*, as well as the events they were associated with, can be gained from their respective tombstones. The relief associated with the Heirapolis inscription depicts a trainer subduing a lion with his whip, which perhaps indicates that lions were among the more popular animals involved in the local spectacles (since they were chosen as the 'representative' species to include on the trainer's tombstone relief). The errors in the inscription may also suggest that the *θηροτρόφος* in question was not a native Greek speaker, but may have been from one of the regions (for example North Africa) where his animals were obtained.<sup>56</sup> The Akmonia inscription records the death of another such official from the attack of an unspecified animal named Bacchus. As Robert suggests this animal may well have belonged to one of the species most commonly associated with Dionysus, such as a leopard or lion.<sup>57</sup> The inscription also notes that the unfortunate *θηροτρόφος* did not perish in the arena, but in *γυμνασίας κλυταῖς*. There is some question among commentators, however, whether the adjective *κλυτός* was originally intended to describe the *θηροτρόφος* or the *γυμνασίαι*: if the latter is the case then the exercises in question may not have consisted of animal training in private, but some sort of public exhibition of the animals.



A first century BC inscription from Caria denotes an individual as a ταυροφέτης, a man who evidently supervised, and at least in some cases, provided the community's supply of bulls. According to the text of the inscription the bulls put under this man's jurisdiction were used for a variety of purposes, not just a single type of event; although he is credited with supplying several bulls at his own expense, only one bull is specified as having been sent εἰς κυνήγιον. Afterwards, in another display of euergetism, the ταυροφέτης distributed the meat of the slain bull to the populace.<sup>58</sup> Given the evident variety of bull spectacles in the Greek east, it does not appear unreasonable to assume that other Greek cities may also have possessed their own ταυροφῆται or similar officials to ensure the smooth running of such events. A late Roman inscription from Aphrodisias records a ταυρωτρόφος who evidently raised bulls for the *venationes*.<sup>59</sup>

Less information is available for the imperial infrastructure associated with the capture and raising of animals in the later empire. Lafaye maintains that the necessary equipment for imperial hunts was supervised by procurators of various hunting districts (*cynegia*) throughout the empire, under the ultimate authority of the *comes sacrarum largitionum*.<sup>60</sup> In all likelihood, the *comes rei privatae*, who was responsible for imperial lands throughout the empire, at least shared some of the responsibility for animal *spectacula*. Among the subordinates working under this official in the eastern empire were the *praepositi gregum et stabulorum* and the *procuratores saltuum*. Although their duties mainly involved the supervision of agricultural estates and herds of elite race-horses, they presumably also included the maintenance of various imperial enclosures and the exotic animals raised therein.<sup>61</sup>

At least one specific official associated with the beast-hunts in the later empire is attested to in the literary sources. In his *Anecdota*, Procopius records that the future empress Theodora's father Acacius was ἀρκτοτρόφος of the Green faction's animals in Constantinople during the reign of Anastasius (491-518), presumably before the banning of wild beast-hunts by this emperor in 498 (see page 221).<sup>62</sup>

Acacius performed many of the same duties in caring for and training these animals as the *θηροτρόφοι* mentioned in the inscriptions from Hierapolis and Akmonia: Procopius refers to Acacius as a *θηριοκόμος*. One interesting aspect of Procopius' description is Acacius' official title of *ἀρκτοτρόφος*. Although he was evidently responsible for a wide variety of animals used in the beast-hunts (*θηριοκόμος τῶν ἐν κυνηγεσίῳ θηρίων*), his official title (*ἀρκτοτρόφος*) refers only to bears. A possible explanation of this anomaly may be that in the later empire at least, when exotic animals were harder to come by, the relatively common bear may have formed the staple of the *venationes* in Constantinople, and thus officials like Acacius became associated with the one animal the city's populace saw most often in the spectacles.

Additional information about the *ἀρκτοτρόφοι* can be gleaned from Procopius' account. The post of *ἀρκτοτρόφος*, as described by Procopius, could at least on occasion be hereditary, and was under the control of the circus factions in Constantinople.<sup>63</sup> Apparently this office was not an exclusively male preserve, but could legally be held by women as well: Procopius records that Acacius' widow remarried soon after his death to have someone to help her care for the animals. The reference to circus factions controlling Acacius' office of *ἀρκτοτρόφος* is the earliest such mention of the factions' involvement in the spectacles of the amphitheatre: such involvement does not appear to have predated the fifth century.<sup>64</sup>

According to Cameron, the involvement of the circus factions in amphitheatre spectacles originated in the state taking over the civic revenues of cities during the reign of Constantius II (337-61). This change in administration meant that the state, and not the individual city government, was now responsible for funding the various spectacles staged throughout the empire. Accordingly a centralized state bureaucracy arose to administer all the various types of spectacle: the same official could be entrusted with the task of providing both the state-owned race-horses and stage-performers with their fodder.

To preserve the 'competitive spirit' of the various spectacles, now all funded from the same government source, the state divided the new 'entertainment bureaucracy' among the four preexisting circus factions: hence from the fifth century onwards the Blues and Greens were to be found in the amphitheatre as well as the circus. Some idea of the hierarchy of this new bureaucracy can be gleaned from Procopius: the ὀρχηστής of a particular faction evidently controlled the appointment of the ἀρκτοτρόφοι. The fact that the 'senior dancer' had the power to control such appointments may perhaps reflect the relative popularity of pantomimes versus *venationes* in the eastern empire.<sup>65</sup>

As various inscriptions indicate, imperial freedmen also played an important role in the production of imperial beast-hunts in Rome and elsewhere. Not all of the attested titles of these freedmen date to the same time period, and it is impossible to state with certainty whether or not all of these offices were contemporary. For instance, we hear of a certain Marcus Aurelius Prosenes, a freedman of Commodus, who at one point in his career fulfilled the role of *procurator munerum*, a kind of supervisor over the various spectacles put on by the emperor.<sup>66</sup> Titus Flavius Augustalis, a Flavian freedman, performed the duties of a *tabularius a muneribus*, and was in charge of the finances involved with such spectacles.<sup>67</sup> An inscription possibly dating to the reign of Caligula shows that a certain Proculus(?) was *libertus commentariensis Ludi Matutini*, evidently acting as administrative secretary to the *procurator Ludi Matutini*.<sup>68</sup>

Other freedmen officials were concerned not with the animals themselves, but with the trained *venatores* responsible for fighting them in the games. An inscription from the Trajanic period mentions the freedman Marcus Ulpus Euphrosynus, *libertus a veste venatoria*. This official was evidently in charge of supplying the clothing for the *venatores*, as his counterparts, *liberti a veste gladiatoria*, were for the gladiators.<sup>69</sup>

Another group of imperial freedmen was involved with attending to the inevitable medical needs of the *venatores* after combat with various animals. For instance, we know of at least two imperial freedmen who were doctors at the *venationes*, much like their counterparts who served at the gladiatorial games. An inscription found in Rome lists a certain Eutychus Neronianus as *medicus Ludi Matutini*, that is to say doctor of the *venationes*. The cognomen Neronianus suggests that such doctors may have been imperial property like gladiators and *venatores*, since we know gladiators owned by Nero in Capua were known as *Neroniani* to distinguish them from gladiators owned by earlier emperors.<sup>70</sup>

It has been suggested that the doctor Eutychus may have been employed at Capua. Another inscription from Rome referring to Eutychus calls him *medicus Ludi*, which, along with his cognomen Neronianus, has led some scholars to assume that he worked as a doctor at the gladiatorial *ludus* in Capua before being 'promoted' to the *venationes* in Rome.<sup>71</sup> An alternative suggestion, since the relative dates of the two Eutychus inscriptions are unclear, is that the term *medicus Ludi* may instead refer to his work at the venatorial training-school in Rome, and the word *Matutinus* was simply left out of the second inscription for reasons of space.

A Greek inscription now in Rome, dating to the reign of Antoninus Pius or a little later, mentions the Hadrianic freedmen Titus Aelius Asclepiades, surgeon of the *Ludus Matutinus*.<sup>72</sup> It goes without saying that numerous other unrecorded doctors and surgeons must have been present at such dangerous spectacles as the *venationes*. According to Wiedemann, medical specialists may have been even more in demand at the *venationes* than at gladiatorial combats, since the *venatores* in the former contests were more likely to suffer painful but non-fatal wounds (from mauling) than the gladiators.<sup>73</sup>

Two other inscriptions, one found in Rome and the other in France, record men of uncertain status who also appear to have performed subordinate roles associated with the *venationes*. Both texts suggest that one could perform not just one

but a variety of functions associated with such events. The first inscription records Apollodorus Tromentina, *medicus equarius et venator*.<sup>74</sup> It can be interpreted one of two ways, if Apollodorus was more than a 'recreational' hunter. He could have been a participant at the *venationes* who also performed veterinary duties periodically for the various animals, or was promoted full-time to the post of veterinarian after a successful stint fighting in the arena. Another theory, espoused by Walker, is that Apollodorus may have performed the function of veterinarian and *venator* within the army. Practitioners of both of these occupations were amongst those soldiers granted *immunitas* from more mundane duties.<sup>75</sup> Apollodorus could theoretically have been amongst the soldiers of the Praetorian Guard entrusted with the collection and supervision of animals for the *venationes* in Rome. One problem with Walker's theory, however, is that the inscription nowhere identifies Apollodorus' military status, an identification one would expect on the analogy of numerous other inscriptions set up by soldiers in the Roman army: the omission of such information would be particularly surprising if he had indeed been a member of the Praetorian Guard.

The second inscription in question, from Aix-en-Provence, records another individual who evidently performed a variety of duties associated with the *venationes*.<sup>76</sup> In the relevant section, the departed boasts:

I was well instructed in the the skilful sport of young men [*lusus iuuenum*] in the arena, and was that 'Good-looker' [*Pulcher*] girt with a variety of weapons. I often made sport of wild animals, but I also lived as their veterinarian and a pal of the *ursarii* [*comes ursaris*].<sup>77</sup>

The dedicatee obviously participated in some sort of arena spectacle apart from fighting animals (*feras*), but the nature of this is unclear. The *lusus iuuenum* mentioned in the inscription was evidently a *venatio*: another inscription from Sangemini specifically praises an *editor Iuuenalium* for the *insignes venationes* he staged.<sup>78</sup> Courtney suggests that the dedicatee may have fought as a gladiator under

the name of 'Pulcher' in the arena, but it is also possible that this was his 'stage name' as a *venator*.<sup>79</sup>

Like Apollodorus in the previous inscription, this individual also performed a veterinarian's duties, either part-time between bouts in the arena, or full-time after he finished his competitive career. The first of these interpretations, strange as it may seem, is more likely, since the dedicatee of the inscription appears to have been listing a series of activities which occurred more or less simultaneously, rather than listing progressive stages of his career. Unfortunately the term *comes ursaris* is also somewhat ambiguous. The *ursarii* referred to could be civilian bear-hunters or members of the military assigned to capture such animals on the frontiers, whose existence is attested to by a number of other inscriptions.<sup>80</sup> Given the dedicatee's involvement in public games, *ursarii* in this inscription might be taken to mean *venatores* who specialized in fighting bears, just as other combatants are known to have specialized in bull-fighting.<sup>81</sup>

#### *The Development of Imperial Animal Spectacula:*

As previously noted, imperial *venationes* tended to become larger and more violent over time. Augustus boasts of having killed 3500 animals in the twenty-six *venationes bestiarum Africanorum* held during his reign (an average of 135 per show), a sum which included 460 lions, 600 African animals of indeterminate type, 36 crocodiles, a rhinoceros, and a hippopotamus. 420 leopards were also put on display on one occasion by the emperor.<sup>82</sup> Caligula's games in 37 saw the death of 800 Libyan animals, including 400 bears, while 300 bears and 300 Libyan beasts perished in the spectacles staged by Claudius four years later. In 55 Nero's bodyguard killed 300 lions and 400 bears at a single imperial *venatio*.<sup>83</sup> Amongst this emperor's unfulfilled schemes was, in imitation of Hercules, the killing of a specially trained lion in the amphitheatre with either his bare hands or a club.<sup>84</sup>

Unlike the Republican period, when all of the animals involved in *spectacula* were not necessarily slaughtered, by the reign of Caligula (37-41), a violent death appears to have been the ultimate fate for most if not all of the animals participating in a given event. This change may reflect an attempt on the part of Roman emperors to make the *spectacula* more exciting, like the gladiatorial games, by adding the element of combat and death. It may also reflect the fact that the supply of exotic animals to Rome was now much more regularized than it had been during the Republican period, allowing emperors to have large numbers of animals killed in the assurance that more would always be forthcoming.<sup>85</sup>

The number of animals killed in the *venationes* rose further under the Flavians, and reached even higher levels under Trajan and Hadrian.<sup>86</sup> As part of the spectacles celebrating the opening of the Colosseum in 80, for example, 9,000 tame and wild animals are said to have perished.<sup>87</sup> Part of the reason for the increased destruction of animals in the later first century was the fact that more *venationes* were staged per year than previously. As noted above, the beast-hunts appear to have been fully integrated into the regular Roman games by the end of the Julio-Claudian period. The Calendar of Philocalus from 354 indicates that, under this 'developed' system, 10 days at the end of December each year were specifically reserved for *munera* involving gladiators and *venationes*, although the total number of such *munera* staged each year in Rome was probably higher due to special celebrations staged by various emperors.<sup>88</sup>

The largest number of animals killed in a series of imperial *venationes*, for which there is credible evidence, is the 11,000 who are said to have perished over 123 days in the games held by Trajan after his final Dacian war.<sup>89</sup> The 120 days of *munera* held by Hadrian as Trajan's potential heir, funded by four million sesterces from the latter, are also said to have included the slaughter of 11,000 animals.<sup>90</sup> A segment of the *fasti Ostienses* from around 120 records the death of 2689 animals in

games held under Hadrian.<sup>91</sup> It is unclear whether the 1000 *ferae* displayed in Athens by Hadrian were ultimately slaughtered as part of the spectacle or not.<sup>92</sup>

Although, as Jennison points out, the literary evidence for imperial *venationes* from the reign of Hadrian onwards is quite sparse, compared with those staged at an earlier date, some trends in the varieties of animals used for the later events do seem apparent. Lions and leopards, which had been a staple of late Republican and early imperial *venationes*, did not evidently feature as often in spectacles of the later empire. Conversely, larger number of herbivores appear to have been employed in *venationes* from the reign of Hadrian onwards. New animals, such as zebras, continued to be introduced at these games, and many of the animals which had first been introduced in the first century AD continued to be involved in subsequent spectacles, perhaps an indication of improved Roman trading-links in the second century with the foreign powers supplying these animals.<sup>93</sup> The decreasing numbers of lions and leopards in later *venationes* may indicate that the population of these animals in the 'traditional' hunting-areas from which the Romans had procured them since Republican times was diminishing.

Numismatic evidence, consisting of coin-reverses with the legend MUNIFICENTIA and images of elephants and lions, appear to confirm the *spectaculum* of 149 attributed to Antoninus Pius by the SHA, when animals like elephants, lions, hyenas, tigers, rhinoceroses, hippopotami, and crocodiles were exhibited by the emperor. Again it is unclear whether this was the animals' last public appearance or not.<sup>94</sup> Among the animals Commodus personally dispatched in public on various occasions were lions, leopards, ostriches, 100 bears, 6 hippopotami, 3 elephants, rhinoceroses, a tiger, and a giraffe.<sup>95</sup> A seven-day *venatio* staged by Septimius Severus (193-211) included a combat between 60 boars, as well as 100 animals per day entering the arena from a collapsing ship mechanism. These animals included asses, bison, lions, bears, leopards, and ostriches.<sup>96</sup> As aedile under Severus, Gordian I is said by the SHA to have put on a massive *venatio* featuring 1000 bears, 100 *ferae*



*Libycae*, 30 wild horses, 200 stags, 10 elks, 100 sheep, 100 Cypriot bulls, 300 ostriches, 150 boars, 30 asses, 200 gazelles, and 200 ibexes.<sup>97</sup> Many of the herbivores involved at this spectacle, if it or anything remotely similar was in fact staged by Gordian, may have been bred at imperial animal-enclosures in Italy.<sup>98</sup>

Although Dio states that Caracalla (211-17) was devoted to hunting, even going so far as to force senators to provide animals, it is not clear how far this interest extended to the staged *venationes* of the amphitheatre. The occasion upon which Caracalla personally killed 100 boars in a single day, however, might be more readily thought of as a public display of the emperor's hunting prowess, like those staged by Commodus (see page 44), rather than a private hunt in some sort of game-enclosure.<sup>99</sup> Elagabalus (218-22) on one occasion exhibited his collection of Egyptian animals to the Roman populace, and on the occasion of his wedding had animals, including an elephant and 51 tigers, killed at a celebratory *venatio*.<sup>100</sup> Philip the Arab (244-49), using animals originally gathered by his predecessor Gordian III, is said to have staged a large *venatio* on the occasion of the Secular Games in 248 including 32 elephants, 100 lions of various types, elks, giraffes, tigers, hippopotami, asses, wild horses, hyenas, and a rhinoceros.<sup>101</sup>

As Wiedemann states, the source for many of these spectacles, the *Scriptores Historiae Augustae*, cannot always be taken at face value.<sup>102</sup> Nevertheless, the scale of the *venationes* it attributes to these emperors could not always have been so outlandish as to provoke outright disbelief in its contemporary readership. Later emperors like Probus and Aurelian are also credited by the *SHA* with the production of elaborate *munera* including *venationes* during their reigns. Aurelian (270-75) is said to have exhibited numerous animals including 20 elephants, 200 *ferae mansuetae* from Libya and Palestine, giraffes, elks, and tigers at his triumph celebrated in 274.<sup>103</sup> At the last recorded imperial *venatio* staged by Probus (276-82) in 281, he is said to have displayed at the Circus Maximus 1000 ostriches, 1000 boars, and 1000 stags, as well as numerous other herbivores. On another day 100 maned lions, 200

maneless lions (?) (*leopardi*), 100 lionesses, and 300 bears, participated in a *venatio* staged in the Colosseum.<sup>104</sup>

The pictorial and literary evidence suggests that in the third and fourth centuries emperors tended to concentrate on providing rare species of animals in their *venationes* rather than killing off vast numbers of more common species of animals as emperors like Trajan had done. This trend may well be related to a diminishing supply of animals suitable for the *venationes* in the late empire. Unusual combinations of animals, such as bears and bulls, were also forced to fight each other in order to increase the novelty of the games.<sup>105</sup>

A passage from the *SHA* indeed suggests that, at least on occasion, later emperors were perhaps more sparing of their animals than their predecessors. It records a list of wild animals kept in Rome during the reign of Gordian III, ...*quae omnia Philippus ludis saecularibus vel dedit vel occidit...*, including tame lions and leopards.<sup>106</sup> The word order may suggest that more animals were exhibited than were slaughtered by Philip; ninety tame felines, that in all probability did not perish as part of the *spectacula*, form a sizeable portion of the listed number of animals.

In addition, it cannot always be assumed that the common term *ferae* as used in the *SHA* and other sources refers to predators which would be involved in violent spectacles. *Ferae* rather appears to refer to undomesticated animals in general, some of whom, such as gazelles, are not naturally aggressive and would therefore be as suitable for simple, non-violent displays as for *venationes*. The passage just cited records that Gordian III had prepared both *feras mansuetas et praeterea efferatas* for his planned Persian triumph, of which the former group may have been intended for display and the latter for combat. Only in the case of animals labelled *bestiae*, a term which apparently does refer normally to predators, can we assume with a fair degree of certainty that such animals were involved in *venationes*.<sup>107</sup>

### *Animal Spectacles as Propaganda:*

As in the Republican period, the variety of exotic animal(s) exhibited to the public by different emperors often was meant to reflect recent Roman military or diplomatic successes in a given region. Under Augustus, at least one tiger was exhibited to the Roman populace as a reflection of current public and official interest in the Indian subcontinent, while the rhinoceros(es) and hippopotamus displayed and slaughtered during the same reign reflected the recent annexation of Egypt.<sup>108</sup> Claudius, although explicit evidence is lacking, no doubt attempted to introduce new and exotic animals from Britain into his *spectacula* after the invasion of 43, while animals such as warthogs and zebras displayed during Nero's reign reflected contemporary Roman interest in the region of the upper Nile. Trajan probably included a large number of animals from recently-conquered Dacia in the massive *venationes* of his reign. Even a more pacifistic emperor like Antoninus Pius used various animals in his *spectacula* to emphasize Roman control over the known world: the *SHA* credits him with including tigers, lions, rhinoceroses, in short animals *ex toto orbe terrarum* in one of his games, likely his *decennalia* celebrations of 148. Coins minted under Antoninus Pius in 148/49, which depict such animals as lions and elephants, appear to confirm this account.<sup>109</sup>

### *'Non-Imperial' Animal Spectacula and their Infrastructure:*

The staging of spectacles, including animal events, was of course not limited to those sponsored by the emperor in Rome itself. In the major cities of the Greek east, priests of the imperial cult are known to have possessed their own troupes of gladiators and *venatores* with which they could periodically stage various spectacles.<sup>110</sup> Magistrates or wealthy citizens throughout the empire, although not legally required to do so, were also normally expected to stage *munera* by their

communities, who often contributed money towards the cost of such spectacles.<sup>111</sup> The games of Pliny the Younger's friend Maximus, for example, were staged under popular pressure in Verona as a tribute to the latter's deceased wife. Maximus' attempt to procure wild felines for his *venatio* implies that even in the late first century there still existed a private trade in such animals.<sup>112</sup>

Not surprisingly, local magistrates like Maximus would often commemorate their *munera* in some fashion so as to impress posterity with their generosity towards their communities. Many of these records contain incidental details which help us to reconstruct the types and scale of spectacles staged in smaller communities outside of Rome. To judge from the surviving inscriptions concerning *venationes* in particular, the organizers of these events often boasted of the number of animals involved and killed during the proceedings in order to enhance their own prestige. The duumvir Publius Baebius Justus, for example, boasted of having killed 10 'cruel' (*crudeles*) bears and 16 *herbanae* over a period of four days in his *venatio* staged in Minturnae on August 1, 249. The adjective *crudeles* used to describe the bears served to emphasize the bravery of Justus' *venatores* and further justify the slaughter of the animals.<sup>113</sup>

In 57, the year in which he built his wooden amphitheatre in Rome, Nero instituted a short-lived ban on all *munera* in the provinces, except those under imperial patronage. Although Tacitus implies that this measure was taken to relieve the financial burden that the magistrates staging their own games were imposing on their local communities, Nero may also have felt that provincial games outside of his control would undermine the prestige and popularity he would earn by staging his own *munera* in the capital.<sup>114</sup>

Apart from the literary and epigraphic evidence just mentioned, several works of art, in particular mosaics, also shed additional light on the organization and infrastructure behind non-imperial *venationes* staged in the Roman provinces. These pictorial scenes, like inscriptions, often give information concerning the

different varieties and numbers of animals involved in particular events. A few mosaics, to be discussed below, are particularly important, since they provide evidence of the *venatio* corporations working behind the scenes to produce the spectacles of local magistrates.

The most famous, and informative, African *venatio* mosaic is likely the mid-third-century Magerius mosaic from Smirat, which illustrates a 'typical' beast-hunt staged by a local magnate (Fig. 3). Like the Zliten (see page 88) and El Djem mosaics, that of Magerius appears to have been commissioned for the estate in which it was found, so that its owner could advertise to his guests and clients his wealth and munificence, as typified by the depicted *venatio*. As Dunbabin notes, the lack of an amphitheatre, or even a sizeable settlement at Smirat in the Roman period, makes it probable that Magerius gave his *venatio* in one of the nearby large cities such as Thapsus, which did in fact possess such facilities.<sup>115</sup>

The mosaic depicts four *venatores* in combat with four leopards. Diana, holding a stalk of millet, presides over the scene as patron goddess of the amphitheatre.<sup>116</sup> All of the leopards wear garlands of either millet or ivy. The first hunter Spittara, mounted on what appears to be stilts, dispatches the leopard Victor with his hunting-spear. The second *venator* Bullarius fights the leopard Crispinus with the assistance of Hilarinus, whose leopard Luxurius is already mortally wounded. The last hunter Mamertinus is depicted slaying the leopard Romanus. Despite the fact that the *venatores* all apparently belong to the same troupe, they wear different costumes. The bare-chested Spittara has virtually no protection against the leopards' attacks, while Bullarius is afforded at least some protection by the leather-reinforced tunic he wears.

The most interesting aspect of this mosaic, apart from the depiction of the combatants, is the request of the herald and the acclamation of the spectators. The request of the herald runs as follows:

Proclaimed by the *curio*: "My lords, in order that the *Telegenii* should have what they deserve from your favour for (fighting) the leopard, give them five hundred denarii"<sup>117</sup>

As we shall see, the *Telegenii* mentioned here were evidently the corporation responsible for staging this particular *venatio*. Numerous corporations such as this one staged *venationes* in Africa by providing the animals, hunters, and attendants necessary for such shows. Inscriptional evidence indicates that the *Telegenii* were active throughout Roman Africa, while other such groups were more local in character.<sup>118</sup> Each had its own number and emblem so as to be easily distinguishable from its competitors. Larger corporations like the *Telegenii* were apparently subdivided into sections of *succursales* or *filiales*. Supporters could evidently join their favourite group (for example, become a *Telegenius*), similar to the circus factions of the later empire.<sup>119</sup> It is entirely possible that one of these hunting-corporations possessed a travelling-troupe of arena bears based in Carthage, to judge from the evidence of a number of mosaics depicting such animals in the vicinity of the city.<sup>120</sup>

The *curio*'s declaration also provides some information about the financial arrangements behind local spectacles such as that staged by Magerius. The *curio* requests Magerius to pay the *Telegenii* 500 *denarii* per leopard, evidently the minimum fee for the animals provided. The generosity of Magerius is indicated in the mosaic by the depiction of four sacks of 1000 *denarii* apiece, thereby indicating he paid the *Telegenii* double the sum requested by the *curio*.<sup>121</sup> It is of course dangerous to speculate from a single piece of evidence such as this, but those providing animals for *venationes* may, like Magerius, have normally paid separately for each animal which appeared in the spectacle. This would seem to be a more sensible arrangement than paying a bulk sum for the expected number of animals beforehand, given the distances and other uncertainties involved in the shipment of animals to various centres.

The crowd's acclamation in the Magerius mosaic provides further information concerning the *venatio*, details of which can perhaps be viewed as typical for spectacles staged by local magistrates and benefactors throughout the provinces. The text in translation runs as follows:

They shouted: May future generations know of your *munus* because you are an example for them, may past generations hear about it; where has such a thing been heard of? When has such a thing been heard of? You have provided a *munus* as an example to the quaestors; you have provided a *munus* from your own resources. That day: Magerius gives. This is wealth. This is power. This is now. Night is now. By your *munus* they were dismissed with money-bags.<sup>122</sup>

The first point to note about this acclamation is the comparison of the *venatio* staged by Magerius to those staged by the quaestors in Rome. The beast-hunts put on by the quaestors each December, being perhaps the only regularly-scheduled *venationes* in the capital (see page 43) were natural objects of comparison for spectacles staged by local magnates like Magerius. The acclamation in the mosaic also suggests that Magerius' *venatio* lasted but a single day, since it explicitly links the departure of the *Telegenii* with their money to the coming of night.<sup>123</sup> Undoubtedly, most of the animal spectacles staged outside of Rome only lasted one day since the local sponsors, unlike the emperors and their officials, would not normally have been wealthy enough to purchase the number of animals necessary for an event staged over several days.

The fact that the crowd's acclamation in the Magerius mosaic appears to treat the term *munus* as being synonymous with *venatio* indicates the popularity of *venationes* among North Africans in particular. The text makes reference to Magerius' games as a *munus*, despite the fact that the mosaic provides no evidence that anything other than a *venatio* was involved in the spectacle. This terminology may indicate, as previously suggested, that gladiatorial contests were extremely rare in third century Africa, and that *venationes* alone were the standard spectacles produced at that time by African *editores*.<sup>124</sup>

Hunting-corporations responsible for producing local *venationes* such as that staged by Magerius were evidently not confined to North Africa. A mosaic from Britain, dating to the mid-fourth century, may indicate just how widespread the activity of African corporations like the *Telegenii* really was. The mosaic in question, whose central medallion depicts Venus and a Triton(?), comes from a large Roman villa near Rudston in Yorkshire (Fig. 4). For our purposes, the most interesting sections of the floor are the four lunettes surrounding the Venus roundel. Each of these zones depicts a different wild animal: a bull labelled TAURUS OMICIDA ('Man-killing bull'), a leopard, a stag, and a wounded lion denoted as [LEO] F[R]AMEFER ('Spear-bearing lion'(?)). The figures of four huntsmen (one of which is now destroyed) fill the spaces between these animal scenes. The fact that the bull is named Omicida, a name which, as we shall see, is used elsewhere to denote arena animals, suggests that the mosaic as a whole depicts a *venatio* rather than a hunt in the wild. The most interesting aspect of the scene, however, is the staff with a crescent-shaped head above the bull. Neal suggests this object may be a goad, yoke, or axe, but none of these interpretations is particularly convincing.<sup>125</sup> The device most closely resembles the crescent-headed staff, representative of the *Telegenii*, held by one of the figures in a previously-mentioned mosaic from El Djem (see note 119).<sup>126</sup>

Given the above evidence, it appears likely that the owner of the villa hired the *Telegenii* to stage a *venatio* featuring imported African animals (for example leopards), and, like the commissioner of the Smirat mosaic, subsequently commemorated his generosity with a mosaic in his own home. If this interpretation is correct, it incidentally suggests that African wild animal populations were not as devastated by the *venationes* as is commonly assumed, since even as late as c. 350, such animals were still being exported from Africa to Britain.

Although the evidence is not conclusive, it is reasonable to assume that corporations similar to the *Telegenii* also produced spectacles in the eastern empire. An inscription from Mylasa honouring the patron of a group of *venatores* may have



been commissioned by such an association.<sup>127</sup> The *lanista* from Beroea who staged an animal-spectacle in Antioch (see page 78) also was perhaps in charge of one of these local groups. Since these corporations were present in both North Africa and the eastern empire, they probably existed in the western provinces as well, although firm evidence is lacking.

#### *Animal Spectacula of the Late Empire:*

Most of the detailed evidence for *venationes* staged by imperial magistrates in Italy and the provinces comes from the late empire. The letters of Symmachus, for example, provide a great deal of information about the staging of *venationes* by public officials in late fourth and early fifth century Rome. Symmachus describes two sets of such games staged on behalf of his son in his letters, the first for the latter's quaestorship in 393 and the second for his praetorship in 401.<sup>128</sup>

Symmachus, expecting his son to become praetor in 400, began two years earlier to collect the animals to celebrate the expected event, a good indication of the preparation time required for an animal spectacle. An additional year of preparation time was gained when the son was not elected praetor until 401.<sup>129</sup> In two letters written at this time Symmachus thanked Stilicho for allowing the use of the public post to his agents buying Spanish horses, and requested the use of the Colosseum for the praetorian games, a request which was ultimately granted.<sup>130</sup> The variety of animals gathered by Symmachus indicates that, whatever problems may have existed in the later empire with declining animal populations and the like, an infrastructure still existed at the end of the fourth century sufficient to bring large numbers of exotic animals to Rome for the *venationes*, at least on occasion.

For the games to celebrate his son's quaestorship, Symmachus expected to obtain some lions, most likely from North Africa, and bears. A popular attraction at these games were the seven Irish wolfhounds brought all the way from Scotland. In

order to further increase the splendour of this particular spectacle, Symmachus also asked the current governor of Africa, Paternus, to send a group of famed local arena *venatores* to Rome for the beast-hunt.<sup>131</sup> A subsequent letter written in 394, however, indicates that some of the animals procured from overseas for these games were lost in a shipwreck en route to Rome.<sup>132</sup>

An even larger variety of animals was also brought to Rome for the praetorian games of 401, in particular horses for the chariot-races. Although some of these animals appear to have come from Italy itself or Gaul, the majority were imported from Spain, no doubt because of the outstanding reputation horses from the latter region enjoyed in antiquity. Symmachus was once more able to obtain the use of the public post for his servants in order to facilitate their journey to Spain.<sup>133</sup> After a number of horses sent by one of Symmachus' friends in Spain perished en route to Rome, he asked another friend in Arles to winter some other Spanish horses on the latter's estate, evidently so that they, unlike some of the earlier group of horses, would not die of exhaustion on a long, non-stop journey to Rome.<sup>134</sup> To judge by his letters, Symmachus also brought a large number of bears to Rome for this particular spectacle, from such diverse regions as Italy, Dalmatia, and in all likelihood, the Balkan peninsula, as well as the northern frontier of the empire.<sup>135</sup>

Particularly exotic animals involved in the games included an unspecified number of leopards, which may have participated in a procession rather than a *venatio*: Symmachus refers to a *leopardorum cursus* in the arena.<sup>136</sup> Lions in all likelihood also took part in the games of 401, since in a letter dated to 400, Symmachus asks for imperial permission to obtain an additional supply of *Libycae ferae*.<sup>137</sup> Other African animals which Symmachus at least attempted to import for the praetorian games included topi and impalla antelopes from Africa.<sup>138</sup> Egyptian crocodiles were evidently one of his prize exhibits at the games of 401. In one of his letters, Symmachus mentions all the animals being imported for the praetorian games, but only specifies the crocodiles by name. Another indication of this animal's special

status is the fact that Symmachus attempted, albeit unsuccessfully, to keep these crocodiles alive until some of his relatives who had been absent from the spectacles could reach Rome to see them.<sup>139</sup>

Claudian, a contemporary of Symmachus, records similar details concerning the gathering of animals from widely scattered locations for the games. For the *venatio* held during the consulship of Manlius in 399, Claudian records the importation, or at least expected importation, of bears, lions, leopards and other animals from such diverse locations as Gaul, Spain, and the Alps.<sup>140</sup> A similar variety of animals was expected for the spectacle celebrating Stilicho's consulship in 400: Claudian gives a highly romanticized account of capturing lions from Libya, boars from Germany, deer from Corsica and Sicily, lions and leopards from Ethiopia, and bears from Spain, as well as unnamed animals from Gaul, Dalmatia and Italy. Tigers, snakes, and lynxes are also included in the list of animals collected for these games.<sup>141</sup> Claudian further records the presence of Libyan lions at the games staged to celebrate Honorius' sixth consulship in 404.<sup>142</sup>

The letters and orations of Libanius also provide an insight into the organization of the contemporary *venationes* staged in Antioch. Such spectacles in Antioch were normally the responsibility of the Syriarch, an official whose term of office was apparently four years. Ideally, the Syriarch was to stage annual *venationes* for the province of Syria during his term, although we shall see that this schedule was not always rigidly observed. One of these spectacles was normally produced at the conclusion of the games of Olympian Zeus held in Antioch every four years.<sup>143</sup> The letters of Libanius make it clear, however, that beast-hunts unconnected with the festival of Olympian Zeus also took place periodically in Antioch, such as those staged by the governor of Syria Tisamenus in 386.<sup>144</sup> The importance of *venationes* at this time can be measured by the fact that their production in all cases was entrusted to officials of high status, be they Syriarchs or provincial governors.

The expenses of such spectacles were so great that those staging them were often forced to beg assistance from other officials in order to help defray the costs.<sup>145</sup> In 356/57 Libanius wrote to a councillor of Antioch by the name of Antiochus, requesting the latter to assist Libanius' cousin by capturing bears for an upcoming *venatio* in Antioch. Interestingly enough, this same Antiochus is known to have had estates in Phoenicia, from which the bears in question may have come.<sup>146</sup> A second letter concerning the same spectacle indicates that Libanius' cousin had to obtain an imperial 'nod' (νεῦμα) before he could go ahead with it. Although this 'nod' may have merely been imperial sanction for the *venatio*, it could also have involved the release of funds necessary for such an expensive event.<sup>147</sup>

In 363 Libanius sent another letter to the *vicarius* of Asia, Caesarius, requesting him to aid in the collection of bears from Mount Ida for another *venatio* staged by the Syriarch Celsus.<sup>148</sup> A second letter containing virtually the same request was also sent to the official Dulcitius, evidently in charge of Ionia at the time.<sup>149</sup> The first of these two letters makes it clear that a *venatio* had not been staged in Antioch for some time because of the costs involved. Such a spectacle had evidently not been seen in the city for at least three years, and perhaps as long as seven.<sup>150</sup> In 390, a certain Argyrius, who may well have been Syriarch at the time, was forced to request funds from Tatian, the current praetorian prefect, in order that his planned *venatio* might go ahead.<sup>151</sup>

The expense required to stage the *venationes* in Libanius' day can also be deduced from the efforts some officials took to avoid responsibility for them: in the early 380's reluctant decurions were pressured to assume the Syriarchate and its attendant costs, which in turn led to legislation in 383 stipulating that this office could only be undertaken by volunteers.<sup>152</sup> In 386, the governor Tisamenus, who had failed to cajole one of his colleagues to stage a *venatio* in Antioch, embarrassed them by bringing in an unnamed '*lanista*' with his animals and huntsmen from neighbouring Beroea to do so.<sup>153</sup> If, as Liebeschuetz argues, the office of the

Syriarchate was exclusively concerned with the production of annual *venationes*, the failed attempt by the praetorian prefect Tatian to force Syrian senatorial landowners to contribute to the expenses of the Syriarch is also indicative of the cost of such spectacles.<sup>154</sup>

The few relevant financial figures from the late empire illustrate the expense of animals involved in the *venationes* (as well as the *spectacula* in general). The price of an 'regular' animal should first of all be cited by way of comparison: for example, in early fourth century Palestine, one could buy a young cow for 3-4 *solidi* (approximately 7250-9700 *denarii*).<sup>155</sup> Diocletian's Edict on Maximum Prices lists the price for a single first-grade African lion (the most expensive item in the document) at 150,000 *denarii* (approximately 62 *solidi*), while a lion of the second grade is listed at 125,000 *denarii* (approximately 52 *solidi*). A first grade lioness is listed at 120,000 *denarii*, while one of the second-grade is listed at 100,000 *denarii* (approximately 42 *solidi*). The price for a first-grade leopard is not preserved, but that of a second-grade specimen is quoted at 70,000 *denarii* (approximately 30 *solidi*). Although the prices of the bears and wild asses listed in the Edict have not survived, a first-grade wild boar is quoted at 6000 *denarii* (2.5 *solidi*). An unidentified animal of the second-grade is listed at 2000 *denarii* (approximately 8/10 of a *solidus*).<sup>156</sup> Judging from this price, as well as its position in the text between wild boars and asses, the animal in question was evidently quite run-of-the-mill.

In 409, approximately a century after Diocletian's edict was published, the finances of Antioch's magistrates, who were responsible for staging *venationes* in the city, were temporarily restored by a grant of 600 *solidi*. As Liebeschuetz notes, this sum, discounting inflation over the past century, would pay for only twelve of the first-grade lions mentioned in Diocletian's edict.<sup>157</sup> Although the bears and leopards mentioned in Libanius' letters were much less expensive to purchase than lions, extra money would also have to have been set aside in order to feed the animals before their appearance in the arena, as well as to hire the *venatores* to fight

them.<sup>158</sup> Skilled troupes of *venatores* may well have been scarcely less expensive than the more exotic animals they were pitted against.

Apart from the actual cost of the animals involved in the *spectacula* of the later empire, there was also a tax, or *portorium*, levied on their transport, at least in the western empire. In two letters of 397-98 concerning his brother Cynegius' upcoming games in Rome, Symmachus complained about candidates for the quaestorship having to pay such a levy, fit only for private *ursorum negotiatores*, on the transport of bears.<sup>159</sup> This tax, under the ultimate authority of the *comes sacrarum largitionum*, consisted of a 2 or 2.5% levy on selected goods arriving in Rome. Members of the imperial family were of course exempt from such taxation.<sup>160</sup>

Since members of the quaestorial order, according to Symmachus, had never previously paid the *portorium* on animals, it appears to have been a recent innovation: Symmachus himself did not have to pay any such tax when helping to organize the quaestorial games of 393.<sup>161</sup> In the later empire, the government evidently no longer wished, or had the financial reserves, to uphold an earlier decree of Marcus Aurelius and Lucius Verus, whereby...*fiscum remouerunt a tota harena*.<sup>162</sup> One possible motivating factor for this change of policy may have been the disorder in the western empire after the death of Theodosius in 395: amongst the problems placing a burden on Honorius' treasury in 397 were Stilicho's campaign against Alaric in Greece and the revolt of the *comes* Gildo in Africa.<sup>163</sup>

Although not explicitly stated by Symmachus, it is likely that this *portorium* applied to all wild animals imported for the *spectacula*, and not just bears alone.<sup>164</sup> Justinian's Digest records, amongst other luxury-goods subject to a *vectigal*, lions, lionesses, leopards, maneless lions, and cheetahs.<sup>165</sup> Since bears, however, to judge by the correspondence of both Libanius and Symmachus, were the most frequent participants in the animal-spectacles of the later empire, they would have been an ideal commodity to tax for cash-strapped imperial officials. If one assumes that bears made up the majority of animals imported by Cynegius (and therefore were

responsible for the majority of the *portorium* to be paid), this would perhaps explain why Symmachus mentioned only these animals in his complaint to Paternus.

Since lions, lionesses, leopards, maneless lions, and cheetahs were rare enough to be classified as luxuries subject to the *vectigal* in the late empire, the whole group, and not just the lions, may well have belonged to an imperial monopoly. All of these animals, and not just lions and elephants, were perhaps denoted by the term *bestias regias* mentioned in the *Historia Augusta*.<sup>166</sup> In another of his letters written to Stilicho in 400, Symmachus praised the emperor Honorius for providing leopards for his son's spectacle in Rome, thereby suggesting that the supply of these animals was indeed under imperial control, at least in the western empire.<sup>167</sup>

In order to procure a sufficient supply of animals and performers for the shows, preparations for the Antioch *venatio*, like those in Rome, were apparently often undertaken more than a year in advance.<sup>168</sup> The letter written to Antiochus concerning the collection of what may well have been Phoenician bears has already been mentioned. A number of letters written in 357 record Libanius' efforts to obtain bears from Bithynia, whose wildlife evidently enjoyed something of a reputation, for an upcoming *venatio* in Antioch.<sup>169</sup> In 363 Libanius wrote two other letters in an attempt to procure bears from the mountains of Ionia, in particular Mount Ida.<sup>170</sup> The latter letter, as well as another written in 357, suggest the presence of large numbers of leopards in Syria and Ionia respectively.<sup>171</sup>

To judge from Libanius' letters, arena *venatores*, like their animal opponents, were also recruited from various locales. Writing in 360, Libanius stated that the finishing touch of his cousin's liturgy would be the recruiting of such performers from all over the region (πολλαχόθεν). In this particular letter Libanius was attempting to procure some of the obviously renowned beast-hunters from Phoenicia for his cousin's spectacle.<sup>172</sup> *Venatores* in the diocese of Asia itself also appear to have enjoyed a certain degree of popularity: the athletes which Libanius requested from the *vicarius* of Asia, Clearchus, in 364 were evidently such beast-fighters.<sup>173</sup>

Libanius' letters suggest that the methods used to capture animals for the *spectacula* were much the same as those employed in Cicero's day. Prominent individuals could still appeal directly to administrators in 'wildlife-rich' areas for various animals, much as Caelius had done to Cicero. In two letters concerning the capture of animals for a *venatio* of 364, Libanius urges both the current *vicarius* and proconsul of Asia to assist a certain Polycarpus in purchasing animals for the event in Bithynia.<sup>174</sup> Polycarpus evidently acted as a middle-man in the animal-trade between Bithynia and Antioch, much as Patiscus did for the shipment of leopards from Cilicia to Rome some four hundred years earlier. In the latter fourth century at least, notables from different regions could also assist each other in gathering animals for the *spectacula*: in two of his letters dating to 357, an exchange of Syrian leopards for Bithynian bears is mentioned by Libanius.<sup>175</sup>

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Notes:

<sup>1</sup> Plutarch, *Sulla*, 5.

<sup>2</sup> Ville (1981) 59. This episode illustrates the fact that plebeian aediles, as well as curule aediles, were at least occasionally entitled to stage animal spectacles in Rome: see Ville (1981) 96-97.

<sup>3</sup> Cicero, *In Vatinius*, 15, 37; *Pro Sestio*, 44, 134-35; Ville (1981) 64-65. The law in question was the *lex Tullia de ambitu*, passed by Cicero during his consulship in 63 B.C.

<sup>4</sup> Bertrand (1987) 229.

<sup>5</sup> Jennison (1937) 51-52.

<sup>6</sup> *Mishna*, Avodah Zarah 1, 7; Jennison (1937) 167; Friedländer (1968) Vol. 4; 534.

<sup>7</sup> Although the edited *Mishna* code as a whole dates to the late second century AD, it has been suggested that the edict banning the sale of wild animals is at least as early as the first century in date, perhaps even earlier: see Hayes (1997) 175.

<sup>8</sup> Suetonius, *Julius*, 75, 3; Münzer (1918) 471-72.

<sup>9</sup> Plutarch, *Cicero*, 36, 5; Cicero, *Ad Familiares*, 2, 11, 2; 8, 2, 2; 8, 4, 5; 8, 6, 5; 8, 8, 10; 8, 9, 3; *Ad Atticum*, 5, 21, 5; 6, 1, 21; Bertrand (1987) 212; Toynbee (1996) 20; Jennison (1937) 137-40. The term used in the letters is *pantherae*, which technically can denote a number of different spotted felines. Most scholars [for example Toynbee (1996) 20; Jennison (1937) 137] assume, however that the animals requested from Cicero were leopards. Caelius' subsequent colleague in the aedileship, Marcus Octavius, also requested leopards from Cicero: see Cicero, *Ad Atticum*, 5, 25, 1; 6, 1, 21; Jennison (1937) 139.

<sup>10</sup> Cicero, *Ad Familiares*, 8, 9, 3; Jennison (1937) 138, n. 1.

<sup>11</sup> Cicero, *Ad Familiares*, 8, 4, 5; 8, 9, 3.

<sup>12</sup> Jennison (1937) 150-51.



- <sup>13</sup> Cicero, *Ad Familiares*, 2, 11, 2; *Ad Atticum*, 6, 1, 21.
- <sup>14</sup> Jennison (1937) 139, n. 3: cf. Ville (1981) 349.
- <sup>15</sup> Cicero, *Ad Familiares*, 8, 9, 3.
- <sup>16</sup> Cicero, *Ad Familiares*, 2, 11, 2: Jennison (1937) 140.
- <sup>17</sup> cf. Jennison (1937) 140, n. 1: Ville (1981) 348.
- <sup>18</sup> Cicero, *Ad Familiares*, 8, 9, 3.
- <sup>19</sup> Scobie (1988) 195.
- <sup>20</sup> Lafaye (1963) 700.
- <sup>21</sup> Wiedemann (1995a) 55, 59: Ville (1981) 123-25: Edmondson (1996) 79. For a far more detailed discussion of the *venationes* staged by the Julio-Claudian and Flavian emperors, see Ville (1981) 99-116, 129-55.
- <sup>22</sup> Pliny, *NH*, 8, 2, 4-5: Ovid, *Metamorphoses*, 11, 25-27: Ville (1981) 126-27: However, although the precedent for the later 'fixed' association between gladiatorial combat and *venationes* was established under Augustus, such an arrangement did not become standard until after his death. An inscription from Pompeii (CIL 4, 1200) actually refers to *venatores* as *matutini*: see Sabbatini Tumolesi (1980) 81-82.
- <sup>23</sup> Ville (1981) 155-58.
- <sup>24</sup> Ville (1981) 387-88. As Fora [(1996b) 44] notes, however, independent *venationes* could still be staged as late as the third century.
- <sup>25</sup> Suetonius, *Augustus*, 43, 1: Jennison (1937) 63.
- <sup>26</sup> Suetonius, *Caligula*, 18, 3; *Claudius*, 21, 3: Jennison (1937) 68-69.
- <sup>27</sup> Wiedemann (1995a) 48, n. 16: Galsterer (1981) 415-16.
- <sup>28</sup> Wiedemann (1995a) 8.
- <sup>29</sup> Sabbatini Tumolesi (1988) 39-40, 127-128: Robinson (1994) 169.
- <sup>30</sup> Dio 53, 27, 6: Toynbee (1996) 18.
- <sup>31</sup> Dio, 69, 14; 60, 5, 6: CIL 6, 32323: Sabbatini Tumolesi (1988) 47: Robinson (1994) 169. Ville (1981) 164-65.
- <sup>32</sup> Suetonius, *Claudius*, 24, 2: Tacitus, *Annals*, 11, 22, 2: Scobie (1988) 195, n. 35: Galsterer (1981) 415: Ville (1981) 165-68: According to Tacitus [*Annals* 13, 5, 1-2], Nero abolished this obligation in 55, but this ban on quaestorian *munera* did not even survive his reign.
- <sup>33</sup> Galsterer (1981) 415-16.
- <sup>34</sup> Robinson (1994) 169. This responsibility for damages was likely taken over by the urban prefect when he became responsible for the *disciplina spectaculorum*.
- <sup>35</sup> Symmachus, *Epistulae*, 2; 46, 76, 77: 4; 7, 8, 12, 58-60, 63: 5; 56, 62, 82: 6; 33, 35, 43: 7; 48, 59, 82, 98, 105, 106, 121, 122: 9; 15, 16, 20, 27, 117, 135, 141, 144, 151: Robinson (1994) 167.
- <sup>36</sup> Suetonius, *Gaius* 27, 4: Wiedemann (1995a) 170.
- <sup>37</sup> Buonocore (1992) 144.
- <sup>38</sup> Wiedemann (1995a) 170: Sabbatini Tumolesi (1988) 39-40. It is possible, since the regionary catalogues of Rome place the *Ludus Matutinus* in the second region of the city, that an earlier structure existed in this area, replaced by the building erected near the Colosseum by Domitian: see Ville (1981) 282-83.
- <sup>39</sup> Wiedemann (1995a) 8.
- <sup>40</sup> Sabbatini Tumolesi (1988) 39-40, 127-28.
- <sup>41</sup> Jennison (1937) 174. For details of this structure's excavation, see Colini (1944) 287.
- <sup>42</sup> *AE* 1972, 574: Buonocore (1992) 28.
- <sup>43</sup> Sabbatini Tumolesi (1988) 128.
- <sup>44</sup> Golvin (1988) 150, n. 435.
- <sup>45</sup> Jennison (1937) 194.
- <sup>46</sup> IGUR 1060: Sabbatini Tumolesi (1988) 33, 40.
- <sup>47</sup> Frank (1959) Vol. 2; 348.
- <sup>48</sup> Sabbatini Tumolesi (1988) 128: Buonocore (1992) 26.
- <sup>49</sup> ILS 1428: Fora (1996a) 33-34.

- <sup>50</sup> Buonocore (1992) 26. The inscription also raises the question of whether or not 'regional procurators' existed for *familia venatoria* in different areas as they evidently did for their gladiatorial counterparts: was there, for example, also a *procurator familiarum venatoriarum* in Sicily, Aemilia, and Dalmatia?
- <sup>51</sup> ILS 1420: Fora (1996a) 31-32.
- <sup>52</sup> *AE* 1984, 450: Buonocore (1992) 27-28.
- <sup>53</sup> Robert (1971) 309-10.
- <sup>54</sup> *Patrologia Graeca*, 104, 1432a: Roueché (1993) 73, n. 44.
- <sup>55</sup> Robert (1971) 320: For the *adiutor ad feras* see CIL 6, 10208.
- <sup>56</sup> Robert (1971) 155-56, n. 125: the errors in question include the use of  $\chi\epsilon\rho\epsilon$  instead of  $\chi\alpha\iota\rho\epsilon$  in the inscription.
- <sup>57</sup> Robert (1971) 157-58, n. 129.
- <sup>58</sup> Robert (1971) 315.
- <sup>59</sup> Roueché (1993) 73, n. 44.
- <sup>60</sup> Lafaye (1963) 697. It should be noted however that, although Lafaye cites the *Notitia Dignitatum* as evidence for this comment, the text in fact nowhere records such *cynegia*: in his discussion of the role of the *comes sacrarum largitionum*. Jones nowhere mentions such a responsibility: see Jones (1992) 427-38.
- <sup>61</sup> *Notitia Dignitatum*, Or., 14, 6-7: For the duties of the *comes rei privatae*, see Jones (1992), 412-17.
- <sup>62</sup> Procopius, *Anecdota*, 9, 2: For the banning of *venationes* by Anastasius, see Cameron (1973) 228.
- <sup>63</sup> These circus factions administered the various chariot-teams (ie Blues and Greens) racing in Constantinople. Due to the tremendous popularity of chariot-racing in the city, such factions enjoyed a considerable degree of power and even political influence.
- <sup>64</sup> Procopius, *Anecdota*, 9, 5: Cameron (1976) 194-95.
- <sup>65</sup> Cameron (1976) 218-22.
- <sup>66</sup> CIL 6, 8498: Sabbatini Tumolesi (1988) 19-20.
- <sup>67</sup> CIL 6, 33981: Sabbatini Tumolesi (1988) 20-21.
- <sup>68</sup> CIL 6, 352 (30746): Sabbatini Tumolesi (1988) 39-40.
- <sup>69</sup> CIL 6, 8555: Sabbatini Tumolesi (1988) 24.
- <sup>70</sup> CIL 6, 10172: Sabbatini Tumolesi (1988) 40-41.
- <sup>71</sup> CIL 6, 10173: Sabbatini Tumolesi (1988) 41-42.
- <sup>72</sup> IG 14, 1330: Sabbatini Tumolesi (1988) 42.
- <sup>73</sup> Wiedemann (1995a) 117.
- <sup>74</sup> ILS 7813: The term *medicus equarius* does not necessarily mean that Apollodorus dealt only with horses; it may merely be used to indicate his profession as veterinarian, as opposed to a doctor with human patients. See Walker in Toynbee (1996) 313-14.
- <sup>75</sup> Walker in Toynbee (1996) 314.
- <sup>76</sup> CIL 12, 533.
- <sup>77</sup> ILS 6634: Courtney (1995) 327.
- <sup>78</sup> Courtney (1995) 327: A number of other inscriptions record gladiatorial combat or *venationes* staged by the *iuvenes* of various cities throughout the empire. Interestingly enough, the *infamia* which attached to professional gladiators and *venatores* does not appear to have affected amateurs such as these: see Ville (1981) 216-20, 269-70.
- <sup>79</sup> Courtney (1995) 327.
- <sup>80</sup> For military *ursarii* see e.g. CIL 13, 5243; 12048; 5703. The latter inscription was likely dedicated by a soldier or officer, although this is not made explicit in the text.
- <sup>81</sup> For specialist bull-fighters, see e.g. CIL 8, 696, 11914: ILS 5053.
- <sup>82</sup> *Res Gestae*, 22: Pliny, *NH*, 8, 24: Toynbee (1996) 18, 21: Edmondson (1996) 70.

- <sup>83</sup> Suetonius, *Claudius*, 21, 3: Dio 49, 7, 3; 60, 7, 3; 61, 9, 1: Toynbee (1996) 18, 21.
- <sup>84</sup> Suetonius, *Nero*, 53, 3.
- <sup>85</sup> cf. Coleman (1996) 64.
- <sup>86</sup> Galsterer (1981) 415.
- <sup>87</sup> Dio 66, 25, 1: Toynbee (1996) 21-22.
- <sup>88</sup> Wiedemann (1995a) 11-12. By comparison, note again that Augustus only staged twenty-six *venationes* of African beasts during his forty-five year reign.
- <sup>89</sup> Dio 68, 15: Wiedemann (1995a) 60-61: Edmondson (1996) 70.
- <sup>90</sup> *SHA*, *Hadrian*, 3, 8: Dio 68, 15, 1: *AE* 1933, 30: Wiedemann (1995a) 11. Both these games and those held earlier under Trajan would involve the slaughter of approximately eighty-nine animals per day.
- <sup>91</sup> CIL 14, 4546: Fora (1996a) 42-43.
- <sup>92</sup> *SHA*, *Hadrian*, 19, 7; 19, 3: Toynbee (1996) 18.
- <sup>93</sup> Jennison (1937) 83. Scattered references to *venationes legitimae* or *plenae* (which appear to be synonymous terms) outside of Rome may in fact denote such spectacles where a full range of animals (ie bulls, bears, felines, boars, stags etc.) appeared: see Ville (1981) 399. Of course it would not be unusual for smaller municipalities, unlike Rome, to boast of the variety of animals employed in a given event. Sabbatini Tumolesi [(1980) 27-28, 139)], on the other hand, suggests that the term *venatio legitima* merely indicates that the event was a sanctioned and integral part of the day's programme.
- <sup>94</sup> *SHA*, *Antoninus Pius*, 10, 9: Toynbee (1996) 18.
- <sup>95</sup> *SHA*, *Commodus*, 8, 5: Dio 73, 10; 18-19: Herodian 1, 15, 5-6: Ammianus Marcellinus 31, 10, 18-19: Toynbee (1996) 22.
- <sup>96</sup> Dio 77, 1: Toynbee (1996) 18. As Coleman (1996) [54] states, the collapsing ship may have been meant to represent cargo-ships transporting animals to Rome, which would undoubtedly have been familiar enough to a majority of the city's inhabitants. Although Dio states that this spectacle was staged ἐν τῷ θεάτρῳ, contemporary depictions of the event, which show various monuments from the *spina* of the Circus Maximus along with the collapsing ship, indicate that it in fact occurred in the latter venue, presumably for reasons of space: see Humphrey (1986) 115-16.
- <sup>97</sup> *SHA*, *Gordiani Tres*, 3, 6, 7: Toynbee (1996) 18.
- <sup>98</sup> Jennison (1937) 89.
- <sup>99</sup> Dio 78, 10.
- <sup>100</sup> *SHA*, *Elagabalus*, 28, 3: Toynbee (1996) 18-19.
- <sup>101</sup> *SHA*, *Tres Gordiani*, 33, 1, 2: Toynbee (1996) 16.
- <sup>102</sup> Wiedemann (1995a) 13.
- <sup>103</sup> *SHA*, *Aurelian*, 33, 4; 34, 1: Toynbee (1996) 19.
- <sup>104</sup> *SHA*, *Probus*, 19: Toynbee (1996) 19: Jennison (1937) 93.
- <sup>105</sup> Wiedemann (1995a) 61, n. 15.
- <sup>106</sup> *SHA*, *Gordiani Tres*, 33, 1-3.
- <sup>107</sup> *SHA*, *Gordiani Tres*, 33, 3: Merten (1991) 152-53.
- <sup>108</sup> Dio 51, 22, 5: Suetonius, *Augustus*, 43, 4: Ville (1981) 110-11: Merten (1991) 141-42.
- <sup>109</sup> Merten (1991) 143: Aymard (1951) 186-89: *SHA*, *Antoninus Pius*, 10, 9.
- <sup>110</sup> Roueché (1993) 61-64.
- <sup>111</sup> Wiedemann (1995a) 9-10: for an extensive discussion of spectacles staged outside of Rome, see Ville (1981) 175-225.
- <sup>112</sup> Pliny, *Epistulae*, 6, 34: Coleman (1990) 50.
- <sup>113</sup> ILS 5062: Coleman (1990) 50: Fora (1996a) 71-73.
- <sup>114</sup> Tacitus, *Annals*, 13, 31, 4-5: Balsdon (1969) 304: Wiedemann (1995a) 43, n. 129: Toynbee (1996) 17.
- <sup>115</sup> Dunbabin (1978) 68-69.
- <sup>116</sup> Beschaouch (1987) 678: Dunbabin (1978) 67.

<sup>117</sup> Wiedemann (1995a) 16-17.

<sup>118</sup> Although the evidence discussed in this section concerns the participation of hunting-corporations like the *Telegenii* in small-scale *venationes*, there is no reason why these organizations could not also assist in the gathering of animals etc. for larger 'imperial-sponsored' beast-hunts on occasion (see pages 162-63).

<sup>119</sup> Beschtaouch (1987) 680; Dunbabin (1978) 67-68; Roueché (1993) 74-75. For more information on these corporations see the various articles written by Beschtaouch on the subject: CRAI (1966) 134-57; CRAI (1977) 486-503; CRAI (1979) 410-18; CRAI (1985) 453-75. A famous third century mosaic from El Djem depicts members of the *Telegenii*, *Leontii*, *Sinematii*, and *Pentasii* corporations at a *cena libera* prior to an upcoming *venatio*: see Salomonson (1960): 25-55. Although Roueché points out that such corporations could apparently own property, it is unclear how many of the actual arena participants belonging to these organizations were of free status.

<sup>120</sup> Dunbabin (1978) 73-74; Bomgardner (1989) 92.

<sup>121</sup> Beschtaouch (1987) 679; Dunbabin (1978) 68; Coleman (1990) 50-51.

<sup>122</sup> The translation is largely based on that of Wiedemann (1995a) 17 and Veyne (1987) 111.

<sup>123</sup> Beschtaouch (1987) 679-80.

<sup>124</sup> Beschtaouch (1987) 679-80.

<sup>125</sup> Neal (1981) 92-93.

<sup>126</sup> cf. Frere and Tomlin (1992) Vol. 2(4); 86-87, n. 24448.7; Henig (1992) 134. Although RIB notes that the staff above the bull does resemble the emblem of the *Telegenii*, it suggests that this symbol was merely one of many artistic motifs copied from North African mosaics. Given the fact, however, that the Rudston mosaic, so far as I know, is the only one outside of Africa to include such a symbol, in association with arena animals, I would argue that the inclusion of the crescent-staff in the design is no mere artistic coincidence.

<sup>127</sup> Robert (1971) 179, n. 175; Roueché (1993) 74-75.

<sup>128</sup> Jennison (1937) 94-95. Although obligatory praetorian games had been discontinued by Claudius, such spectacles reappeared in Rome under Constantine, and thereafter became a regular yearly feature, as indicated by the mid-fourth century calendar of Philocalus: see Jones (1964) 537; Ville (1981) 390-91.

<sup>129</sup> Symmachus, *Epistulae*, 6, 35; 4, 63; 5, 62; Jennison (1937) 95.

<sup>130</sup> Symmachus, *Epistulae*, 4, 7-8; 6, 33.

<sup>131</sup> Symmachus, *Epistulae*, 2, 46, 76-77; 5, 59; Jennison (1937) 96-97.

<sup>132</sup> Symmachus, *Epistulae*, 9, 117.

<sup>133</sup> Symmachus, *Epistulae*, 4, 58, 60; 5, 56, 82; 7, 48, 82, 97; 9, 20; Jennison (1937) 96: Another letter of Symmachus [4, 62] indicates that notables from as far away as Antioch purchased such horses from Spain: see Petit (1955) 124.

<sup>134</sup> Symmachus, *Epistulae*, 5, 56; 9, 20; Jennison (1937) 151.

<sup>135</sup> Symmachus, *Epistulae*, 7, 121; 9, 27, 132, 135, 142; Jennison (1937) 97.

<sup>136</sup> Symmachus, *Epistulae*, 4, 12; Jennison (1937) 96: Although Jennison [186-87] points out that the term *leopardi* could be used to denote maneless lions, by Symmachus' day the term appears to have been used for leopards proper: cf. SHA, *Elagabalus*, 25, 1, where such animals are referred to both as *pardi* and *leopardi*.

<sup>137</sup> Symmachus, *Epistulae*, 7, 59; 122; Jennison (1937) 96.

<sup>138</sup> Symmachus, *Epistulae*, 9, 144; Jennison (1937) 97.

<sup>139</sup> Symmachus, *Epistulae*, 6, 43; 9, 141, 151; Jennison (1937) 97.

<sup>140</sup> Claudian, *Panegyricus Dictus Manlio Theodoro Consuli*, 291-310.

<sup>141</sup> Claudian, *De Consulatu Stilichonis*, 3, 237-369; Jennison (1937) 98.

<sup>142</sup> Claudian, *De Sexto Consulatu Honorii Augusti*, 619-20.

<sup>143</sup> Liebeschuetz (1972) 141; Liebeschuetz (1959) 118-20; Petit (1955) 127-29; cf. Libanius, *Epistulae*, 544.

<sup>144</sup> Libanius, *Orationes*, 33, 21; *Epistulae*, 970-71; Petit (1955) 129; Liebeschuetz (1959)

116-17.

<sup>145</sup> Libanius, *Epistulae*, 218, 544, 1399-1400: Liebeschuetz (1972) 141-42: Petit (1955) 142.

<sup>146</sup> Libanius, *Epistulae*, 544: Liebeschuetz (1972) 42: Petit (1955) 125.

<sup>147</sup> Libanius, *Epistulae*, 545: Liebeschuetz (1959) 119.

<sup>148</sup> Libanius, *Epistulae*, 1399: Norman (1992) 179.

<sup>149</sup> Libanius, *Epistulae*, 1400.

<sup>150</sup> Libanius, *Epistulae*, 1399: Liebeschuetz (1972) 141: Petit (1955) 129.

<sup>151</sup> Libanius, *Epistulae*, 970-71: Liebeschuetz (1959) 117, 122. The granting of such funds may have been a regular necessity: in these letters Argyrius requested the same funds which his father Obodianus (a Syriarch?) had received from a previous praetorian prefect for a *venatio* in 359.

<sup>152</sup> *CT* 12, 1, 103: Liebeschuetz (1972) 141-42.

<sup>153</sup> Libanius, *Orationes*, 33, 14-15, 21: Liebeschuetz (1972) 142.

<sup>154</sup> *CT* 6, 3, 1 (393): Liebeschuetz (1959) 122: Liebeschuetz (1972) 142. However, it should be noted that despite the prohibitive expenses, the wealthiest Antiochene councillors were evidently still able to assume the Syriarchate and stage *venationes*, thereby showing up their less fortunate colleagues. This may partially explain legislation of 465 which transferred the functions of the Syriarch to the Consular of Syria, thereby ending such losses of prestige a councillor might suffer for failing to put on a show while Syriarch: see Liebeschuetz (1959) 126.

<sup>155</sup> Sperber (1974) 105. In this paragraph I have assumed an exchange rate in practice of approximately 2500 *denarii* to the *solidus* in the early fourth century, although one must keep in mind that this rate fluctuated throughout the century.

<sup>156</sup> SEG 14, 386: Bingen (1971) 193, 281-82: Mattingly (1927) 227-28: Jones (1992) 1017-18: Corcoran (1996) 226. In Diocletian's edict, the λεὸπαρδος in question is in all likelihood a leopard proper, since a maneless lion would presumably not be thousands of *denarii* cheaper than a 'proper' lion merely because of its lack of a mane.

<sup>157</sup> Liebeschuetz (1972) 157.

<sup>158</sup> Based on the figures quoted above, 600 *solidi* would purchase approximately twenty second-grade leopards. Judging from the position of the bears listed in Diocletian's Edict (between leopards and wild boars), such animals would cost between 6000 and 70,000 *denarii* (approximately 2.5 to 30 *solidi*), although perhaps closer to the boars in price.

<sup>159</sup> Symmachus, *Epistulae*, 5, 62; 65.

<sup>160</sup> Chastagnol (1960) 337: Cagnat (1907) 592: if the *portorium* merely applied to items involved in commercial exchange, then it would likely never have been applied to the bears for a quaestorial *munera* in the first place. See De Laet (1975) 475-76.

<sup>161</sup> Symmachus, *Epistulae*, 5, 62: Callu (1982) 198, n. 2.

<sup>162</sup> ILS 5163: Callu (1982) 198, n. 2.

<sup>163</sup> See O'Flynn (1983) 33-37.

<sup>164</sup> Chastagnol (1960) 337.

<sup>165</sup> *Digest*, 39, 4, 16, 7: Mommsen (1985) Vol. III, 407-08: Since the terms *pardi*, *leopardi*, and *pantherae* are used to denote three of these animals, one of them must in all likelihood be a cheetah: see Jennison (1937) 187.

<sup>166</sup> *SHA*, *Aurelian*, 20, 7.

<sup>167</sup> Symmachus, *Epistulae*, 4, 12: See my comments above for the identification of these *leopardi* as leopards proper rather than maneless lions.

<sup>168</sup> Liebeschuetz (1972) 141.

<sup>169</sup> Libanius, *Epistulae*, 544, 586-88, 598-99: Petit (1955) 125.

<sup>170</sup> Libanius, *Epistulae*, 1399-1400.

<sup>171</sup> Libanius, *Epistulae*, 598, 1400: Petit (1955) 125.

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- <sup>172</sup> Libanius, *Epistulae*, 217: Petit (1955) 125.  
<sup>173</sup> Libanius, *Epistulae*, 1179: Petit (1955) 135.  
<sup>174</sup> Libanius, *Epistulae*, 1399-1400.  
<sup>175</sup> Libanius, *Epistulae*, 588, 598: Petit (1955) 125.

### Animal Enclosures and their Administration

In this section we shall examine the various animal-enclosures found throughout Roman territory in the imperial period. It is important to note that these structures were not all of one uniform type: animal-pens ranged from large enclosures built to house the beasts for *spectacula* staged in Rome and elsewhere, to private *vivaria* used for the personal pleasure of their owners. We shall also look at the limited evidence pertaining to the care of animals within these structures, most of which relates to the raising and training of beasts for various *spectacula*.

#### *Imperial Animal Enclosures:*

Much of the existing evidence for the Roman animal-trade concerns the enclosures in which various creatures were kept, as well as individuals entrusted with their care. Several imperial freedmen, presumably under the jurisdiction of the *procurator Ludi Matutini*, were involved with this aspect of animal *spectacula*. As in the case of other 'spectacle-related' officials discussed in the preceding chapter, those associated specifically with the supervision of exotic animal pens appear to have first arisen in the Julio-Claudian period.

A certain Tiberius Claudius Speclator, active in the reign of Claudius and/or Nero, is attested as having been *procurator Laurento ad elephantos*: at least some of the elephants arriving in Italy were quartered in an imperial enclosure in Laurentum before being sent to Rome or elsewhere for various *spectacula*. Laurentum lay some 24 kilometres due south of Rome, close to the coast of the Tyrrhenian sea. Juvenal also alludes to Laurentum's elephant pen in his twelfth satire.<sup>1</sup> The elephants used for processions in Rome, which Didius Julianus attempted to train for combat in the face of Septimius Severus' march on the capital in 193, may also have come from the same enclosure.<sup>2</sup> Although the majority of the elephants

kept in this pen must have been imported from Africa or India, some at least were evidently born in captivity in Italy, despite Juvenal's assertions to the contrary. According to Aelian, one of Germanicus' spectacles in Rome featured twelve elephants born near the city, in all probability in Laurentum.<sup>3</sup>

Other varieties of animals were also evidently quartered in separate pens in Laurentum. A tombstone found on the Via Laurentina between Ostia and Rome, dating to the Flavian period or a little later, records another imperial freedman, Titus Flavius Stephanus, as *praeposito camellorum*. The relief on the tombstone depicting an elephant between two camels suggests that the enclosures for these different animals may indeed have been in close proximity to each other. Although some scholars have thought that Stephanus' supervision may have only involved animals used for military purposes, the fact that the relief associated with this inscription depicts an elephant as well as camels suggests that this official was indeed involved with animal *spectacula*, since elephants were not used by the Roman imperial army. The camels kept in Laurentum were likely used not only for imperial *venationes*, but for various circuses and *pompae* as well.<sup>4</sup>

Animal-enclosures were undoubtedly built at Laurentum because of its strategic location: the animals only had to travel a short distance from Ostia, their main port of entry into Italy, to Laurentum, and kept in readiness for the games in Rome without endangering the urban populace.<sup>5</sup> In addition, a nearby river could provide fresh drinking-water for the creatures during their stay in the area.<sup>6</sup> The natural advantages of Laurentum were obviously recognized even at an early date: one wonders if at least one of these imperial pens in Laurentum was developed from the *therotrophium* possessed by Quintus Hortensius in the Republican period.<sup>7</sup>

Two other animal-enclosures alluded to in inscriptions of the imperial period may also have been located at Laurentum, although hard evidence is lacking. An imperial freedman, Aurelius Sabinus, likely from the reign of Marcus Aurelius and Commodus, is listed as a *praepositus herbariarum* on a funerary inscription found in



Rome. It has been suggested that *herbariae* were perhaps the non-African or oriental animals used in *spectacula*, although as their name suggests, they may merely have been the various herbivorous animals, such as antelopes, shipped to Rome for the games.<sup>8</sup> Another funerary inscription, likely from the reign of Marcus Aurelius and Commodus, mentions Marcus Aurelius Victor, *adiutor ad feras*. This freedman was perhaps the assistant to a *procurator ad feras*, although the latter office is not directly attested by any epigraphical evidence.<sup>9</sup> Victor may well have been in charge of supervising the disembarkment of wild animals at Ostia and their transfer to Rome.<sup>10</sup> Another of his responsibilities may well have been the purchase of cattle to feed carnivorous wild animals brought to Rome: Suetonius records that Caligula, thinking that such cattle were too expensive to be used as fodder for wild animals, substituted condemned criminals instead.<sup>11</sup>

The foregoing evidence suggests that in the imperial period, animals of different types, such as wild and domesticated, were quartered separately and supervised by a core of specialist imperial freedmen. As Bertrand suggests, one can imagine a hierarchy of officials, with the procurator in charge of the imperial enclosure and *praepositi* beneath him in charge of various animal types or breeds.<sup>12</sup>

The previous four inscriptions suggest that animals may have been divided into separate groups for administrative purposes according to different criteria at different periods of time. The first two inscriptions, dating to the later first century, imply that various herbivores, like elephants and camels, were subdivided at that time by species. The latter two inscriptions from approximately a century later indicate a simple distinction between *herbariae* and *ferae bestiae*. This apparent disparity, if not merely due to the small sample of inscriptions, may suggest a worsening supply of animals for *spectacula* in Rome between the first and second centuries AD. In the case of the elephant, it appears that they became scarce in animal *spectacula* of the imperial period rather quickly, and may indeed have been

largely extinct in Roman Africa by the fourth century.<sup>13</sup> By the second century, because of the lavish *venationes* staged by emperors like Trajan and Hadrian, the supply of exotic herbivores, as well as carnivores, may have grown so scarce in Rome that it was no longer felt necessary to distinguish between their different varieties, but only to separate them in general for the obvious reasons mentioned previously.<sup>14</sup>

### *The Enclosures of Rome:*

It seems probable that several imperial enclosures would have been scattered throughout Italy to ensure a ready supply of animals for the numerous recorded animal *spectacula* in Rome. Unfortunately direct evidence for such establishments is not abundant. The largest and most elaborate animal-enclosure(s) undoubtedly existed in Rome itself.<sup>15</sup> Procopius mentions an enclosure for lions and other animals beside the Porta Praenestina, adjacent to Aurelian's city-wall and enclosed by an additional circuit-wall, which had its own gate leading through the city-wall into the city proper. This enclosure may have been located between the Via Labicana and the Aurelian wall, approximately two kilometres distant from the Colosseum (Fig. 5).<sup>16</sup> Such a location, in a thinly populated area of the city, would be ideal for keeping wild animals: large numbers could be transferred at night along the Via Praenestina from the enclosure to the Colosseum without encountering many passersby (Fig. 6).<sup>17</sup>

The topography of the area around the Porta Praenestina, combined with Procopius' account and subsequent archaeological discoveries, allows us to obtain some idea of the enclosure's dimensions and appearance. As late as the eighteenth century a section of wall with windows was situated to the south of the Porta Praenestina, in an area commonly referred to by contemporaries as the *vivarium*. Three wall-paintings of exotic animals, earlier discovered in a subterranean room in the same area, also indicate that the ancient animal-pen was located south of the city-gate (Figs. 7-9).<sup>18</sup> Since the Aurelian wall took a sharp turn 64 metres south of the

Porta Praenestina, the enclosure could not have been wider than this: assuming that it continued lengthwise to the west until encountering the next wall-bastion, Jennison (maintaining that the enclosure was situated within the city-wall) speculates that its length may have been approximately 400 metres, thereby creating an area approximately 28,160 square metres in size. Such an enclosure would accord well with Procopius' description of it as a flat rectangle of land.<sup>19</sup>

Although Procopius explicitly states that the enclosure wall lay outside (ἐξωθεν) that of the city (and most modern scholars concur), Jennison's estimates for the actual dimensions of the enclosure do not appear unreasonable.<sup>20</sup> In any event, the structure would most likely not project past the corner of the city-wall, and the distance between bastions of this wall is roughly equal to the space between it and the Via Labicana. Richardson maintains that the animal-enclosure could not have been situated in this area, since the *Aquae Marciae* would have run through the middle of it, causing "...problems of pollution as well as maintenance."<sup>21</sup> However, his arguments are not compelling. In the first place, it is difficult to see how the animals could pollute the water running high above their heads. Secondly, this enclosure presumably contained a number of animal-pens, in which the dangerous animals could be contained while any work was being done on the aqueduct. Having an aqueduct running through the enclosure would also of course remove the potential difficulty of providing enough fresh water for the animals within.

Renaissance copies of the wall-paintings give a good idea of the variety of animals which could be housed in the structure at any one time. All three of the panels depict a variety of animals arranged in registers, including elephants, camels, bears, lions, a leopard, and giraffe. Although no precise date can be given to the originals on which these paintings are based, their division into registers, with several different ground-lines, suggests a date no earlier than the late second century.<sup>22</sup> The juxtaposition of some of the animals in the same scene, such as lions and antelopes, belongs more to the realm of fantasy than reality: such animals must

have been segregated within the *vivarium* to ensure their survival. Unfortunately, the identity of some of the animals is difficult to determine, whether due to the ineptitude of the original artist or the Renaissance copyist. Interestingly enough, at least five of the seven elephants included in the panels are clearly of the Indian variety, which further confirms that such animals, as well as their African counterparts, were imported by Rome.<sup>23</sup> In sum, these paintings suggest that a wide variety of animals, even in the later empire, was still being transported to Rome.

Other epigraphic and archaeological evidence suggests that the army, as well as the urban cohorts of Rome maintained and supervised at least one other animal enclosure, in addition to that described by Procopius. A funerary inscription found in Rome, dating to the Antonine period, records a certain Titus Aelius, legionary centurion.<sup>24</sup> Aelius, according to the text, "...habuit vivar[ium et curam?] supra iumenta [Caesaris]..." The enclosure supervised by this individual, as we shall see, could not have been that mentioned by Procopius. The find-spot of the inscription indicates that it existed somewhere in the vicinity of Rome, perhaps near Laurentum, where other such enclosures are known to have been located. It is unclear, if one assumes the restoration of the inscription is correct, whether or not the imperial beasts of burden over which Aelius had jurisdiction were housed in this particular enclosure. It is possible that Aelius had two separate, but related, responsibilities: the supervision of both exotic animals in a *vivarium* and domestic animals kept elsewhere.

Another inscription from Rome dated to 241 mentions the *venatores immunes cum custode vivari* Pontius Verus and Campanius Verax, both soldiers of the sixth praetorian cohort, as well as the *custos vivari cohortium praetoriarum et urbanarum* Fuscus Crescentio. The *venatores immunes* mentioned in inscriptions such as this were evidently soldiers who received exemption from certain routine duties in return for undertaking frequent hunting trips for the animals needed at the games and elsewhere. The inscription shows that soldiers could be assigned to the capture or

maintenance of animals, and that certain of these soldiers, like Verus and Verax, were evidently promoted to a more supervisory role over the animals in Rome, presumably because of their previous experience on the frontiers as *venatores immunes*.<sup>25</sup> Perhaps the praetorian *venatores immunes* possessed some authority over their counterparts in the provinces, through whom they were able to procure some of the animals needed for *spectacula* in Rome.<sup>26</sup>

Further evidence suggests that, at least on occasion, the praetorian and urban cohorts could indeed stage their own *venationes*. A black-and-white mosaic found near the Castra Praetoria, depicting a tiger flanked by two *venatores*, carries the inscription EX VICEN F L VELT or VELT (*ex vicennalibus fecit Lucius Vettius vicit (?)*) Although the exact restoration of the inscription is uncertain, the *vicennalia* in question, judging by the apparent later second century date of the mosaic on stylistic grounds, may well be that of Antoninus Pius in 158.<sup>27</sup> The *medici veterinarii* attested as belonging to the Praetorian Guard may well have been primarily concerned with the upkeep of wild animals in Rome destined for such *venationes*, as well as other *spectacula*.<sup>28</sup>

The enclosure inscription discussed above was found between the Castra Praetoria and the Servian wall, at some distance from Procopius' structure. The fact that the Castra Praetoria and a neighbouring building were at one time referred to as *vivarium* or *vivariolum* implies that another animal-enclosure was indeed located in this area. In addition, the finds of exotic animal wall-paintings in a subterranean chamber under the Via Tiburtina, similar to those discovered near the Porta Praenestina, undoubtedly at one time belonged to this structure. Remains found in the area, which were finally destroyed in the nineteenth century, indicate that the enclosure was surrounded by a wall constructed of similar masonry to that used in the legionary camp at Albano. Gates in the western wall gave access to the city, while cells to contain the animals were built against the eastern wall of the enclosure. A channel of flowing water for drainage ran in front of the cages, and a basin in the

centre of the pen provided the various animals within with drinking water.

According to Lanciani, the length of this structure at one time was estimated at 388 feet (approximately 118 metres) (Fig. 10).<sup>29</sup>

Some debate has arisen over whether or not this enclosure and that described by Procopius were part of the same complex. Contrary to what scholars such as Lanciani have stated, it is most unlikely that they were one and the same structure. If the estimate for the length of the 'praetorian' animal-pen given above is at all accurate, it could not have extended to the section of wall where Procopius places it. As Richardson points out, the two structures are not likely to have been constructed at the same time. Since the enclosure described by Procopius was flanked on at least one side by the Aurelian wall, it could not have been built before it, whereas the inscription mentioned above indicates that the animal-pen south of the *Castra Praetoria* was in use well before this date.<sup>30</sup> The 'praetorian' enclosure likely fell into disuse either when the new city wall was built (which may have bisected its original area), or, more likely, when Constantine disbanded the Praetorian Guard and dismantled their barracks, thereby leaving the structure without a 'supervisory' staff.<sup>31</sup> Therefore, if this theory is correct, the animal-enclosure described by Procopius may well have been built in the early fourth century to replace the older one situated south of the *Castra Praetoria*.<sup>32</sup>

As Jennison states, with the number of animals recorded as participants in various imperial *spectacula*, it would not be at all surprising if a number of animal-pens existed at the same time in Rome.<sup>33</sup> Another imperial enclosure may even have been located on the Vatican. Loisel records the discovery of animal-dwellings underneath the present-day church of St. John and St. Peter, which apparently belonged to such a facility. Although the date at which this enclosure was established is uncertain, it was evidently in use by the reign of Claudius: in all likelihood the enormous boa said to have been killed on the Vatican during this emperor's reign was being kept at this pen prior to its death.<sup>34</sup>

*Imperial Animal-Enclosures in the Provinces:*

Scattered literary references indicate that state animal enclosures may have been relatively widespread in other cities throughout the empire. Tertullian implies that animals escaping from their cages in the cities were relatively common, a sentiment echoed at a later date by both John Chrysostom and Libanius.<sup>35</sup> Although none of these references refers specifically to enclosures and could theoretically refer to animals escaping from their cages during transport through a city, John Chrysostom elsewhere states that enclosures in the city are located far away from such important civic structures as the law-courts and palace, so as to minimize the potential damage an escaping animal could cause.<sup>36</sup> At the very least provincial capitals like Antioch in all probability possessed their own animal-pens. An imperial order issued to postpone indefinitely an upcoming *venatio* in Antioch presumably indicates that facilities were available to house the animals spared by this decree.<sup>37</sup>

Although literary evidence exists for animal-enclosures throughout the Roman empire, physical evidence of such structures outside of Rome is not abundant, presumably because most were constructed out of wood.<sup>38</sup> However, the remains of one such possible enclosure are located east of the city of Trier, one of the capitals of the Tetrarchy. The structure in question consists of a low stone wall 72 kilometres in length, enclosing an area of approximately 220 square kilometres (Fig. 11). The two metre high wall was not designed to serve any defensive purpose, but would have been ideally suited for fencing in various animals.<sup>39</sup> Inscriptions set up by some of the troops building the wall indicate that it was erected in the second half of the fourth century, most likely during the reign of Valentinian.<sup>40</sup> The fact that Roman soldiers were enlisted to build this wall indicates that it was commissioned at the very least by a high government official, possibly by the emperor himself.<sup>41</sup>

Although the area enclosed by the wall did not include the most fertile soil in the region, it was still rich enough to support woodlands and agriculture. A number

of structures located within the wall, including villas, pottery-kilns, and tile-manufacturing facilities, indicates that different areas of the enclosed space were used for different purposes.<sup>42</sup> Theoretically, a smaller area within could have been fenced off for either the raising or hunting of wild animals such as bears. It is not altogether impossible that one of the *vivaria* frequented by the emperor Gratian during his campaigns in Gaul (see below) was indeed located within this wall.<sup>43</sup>

### *Imperial Vivaria:*

Apart from enclosures specifically concerned with providing animals for Roman *spectacula*, a number of ancient sources make reference to private *vivaria* maintained by various emperors, on the model of those possessed by nobles in Republican Rome. The parkland around Nero's *Domus Aurea* was apparently stocked with all types of animals while Domitian's Alban estate was probably equipped with a *vivarium* to provide animals for the private hunts said to have been staged there.<sup>44</sup> Pliny the Younger's invective against emperors who collect animals in cages for their own sport suggests that it was not at all uncommon for emperors prior to Trajan to possess their own such animal-enclosures:

*...principes.....usurpabant autem ita ut domitas fractasque claustris feras, ac deinde in ipsorum ludibrium emissas, mentita sagacitate colligerent.*<sup>45</sup>

In a letter sent to Marcus Aurelius in 144 or 145, Fronto gives the young Caesar hunting advice for his new *vivarium*: *ubi vivarium dedicabitis, memento quam diligentissime, si feras percuties, equum admittere.*<sup>46</sup> The exact location of this enclosure is uncertain, but it may have formed part of the imperial estate at Centumcellae, which Fronto states was Marcus' destination at the time when he was dedicating the *vivarium*. Such a site would have been ideal: Pliny the Younger describes the estate as being surrounded by open fields and having excellent harbour facilities.<sup>47</sup> Although Marcus obviously hunted in this *vivarium*, it, like



other such enclosures, was in all likelihood normally used as a breeding and feeding ground for various wild animals when the emperor was absent.

Marcus' son Commodus (180-93) is also said to have kept animals at his estate in order to have a stock ready at hand for his own amusement. Fifty years later, Gordian III (238-44) supposedly maintained a *vivarium* for his anticipated Persian triumph, containing 20 asses, 40 wild horses, 10 elks, 32 elephants, 60 tame lions, 10 tigers, 10 hyenas, 30 maneless lions, 6 hippopotami, 10 *arcoleontes*, 10 giraffes, and one rhinoceros.<sup>48</sup> Presumably if such *vivaria* really existed, the various animal types within them were kept subdivided as at Laurentum. At the end of the third century, Galerius is said to have possessed a special collection of bears for his own bloodthirsty pleasure: *quotiens delectare libuerat, horum aliquem adferri nominatim iubebat. His homines non plane comedendi, sed obsorbendi obiectabantur....*<sup>49</sup> In the mid-fourth century, a hunting-park evidently existed at Macellum in Cappadocia, where Gallus and Julian were sent by Constantius II.<sup>50</sup> In his second oration Julian specifically credits this emperor with an avid interest in hunting various animals, including leopards, bears, and lions: presumably at least some of these separate species were collected together into an imperial animal-enclosure.<sup>51</sup>

Further evidence for such *vivaria* concerns the later family of Valentinian I, which seems to have been keenly interested in the *venationes* and the wild animals participating in them. Ammianus Marcellinus records that Valentinian I (364-75) actually kept two of his favourite man-eating bears near his own bedroom in order to protect them and ensure their savage presence in upcoming events.<sup>52</sup> Sozomen records an anecdote dating to the reign of Valentinian's son Gratian (367-83), when Ambrose of Milan was forced to sneak into the emperor's private *venatio* exhibition in order to plead for a condemned man's life. Interestingly enough, Sozomen comments that such private *venationes* were by no means uncommon (...κυνηγίων. ὅας ἐπιτελεῖν εἰώθασιν οἱ βασιλεῖς τερπωλῆς ἰδίας χάριν οὐ δημοσίας...), which suggests that many emperors may have had their own *vivaria*, not otherwise attested, in order to provide

the animals for such events.<sup>53</sup> Ammianus Marcellinus confirms Gratian's pleasure in private *venationes*, many of which presumably occurred during his stay in Gaul: *...intra saepta quae appellant vivaria sagittarum pulsibus crebris dentatas conficiens bestias...*<sup>54</sup> Ammianus' use of the plural in this passage incidentally suggests that animal-enclosures were still relatively common in the late fourth century.

Gratian's younger brother Valentinian II (375-92) is also credited by the sources with having a keen interest in the *venationes*. Amongst this emperor's favourite pastimes are said to have been bear and lion-hunts, a fact which drew censure from some of his less 'sporting' subjects. According to the historian Philostorgios, Valentinian II was so stung by this criticism that he actually had his collection of wild animals destroyed so as to avoid any similar comments in future.<sup>55</sup> Unfortunately Philostorgios does not specify where Valentinian II's animal-enclosure(s) may have been located, although he, like other similarly-minded emperors, may well have maintained *vivaria* originally established by much earlier emperors.

#### *Private Animal-Enclosures:*

Some private citizens were also involved in animal commerce to stock their own private *vivaria* or enclosures. As noted previously, zoological parks are known to have existed as early as the late Republic at Laurentum, Tarquinia, and Tusculum, and certain exotic animals, such as the lion of Macrinus, were evidently kept as pets by the wealthy.<sup>56</sup> Libanius indignantly mentions an 'entrepreneur' from the town of Beroea near Antioch who maintained his own arena animals and *venatores*, and presumably some type of animal-pen as well.<sup>57</sup> An excerpt from Basil suggests that even as late as the fourth century wealthy citizens could stage their own *venationes*, presumably using animals kept in private enclosures like that at Beroea.<sup>58</sup>

Various Roman laws also suggest that wild animal-pens were common throughout the empire. A statute from Justinian's *Digest* discusses in general terms the rights of a usufruct in regard to the wild animals within his landlord's enclosure.<sup>59</sup> Other laws, while not mentioning enclosures *per se*, discuss legal issues concerning various animals presumably housed in such structures, including bears, lions, elephants, and camels.<sup>60</sup> Smaller enclosures such as these are depicted in various media: a first century Gallo-Roman relief depicts a bear-pit with a tree in the centre for climbing, while a Roman medallion depicts three bear-cages presumably belonging to such a structure.<sup>61</sup>

Perhaps the most curious private individual associated with animal-husbandry is a certain Aurelius, son of Pacatianus. A second or third century inscription on a miniature terracotta boat found near Seville on the lower Guadalquivir river, records this individual as *possessor liipardoru[m]*, *denudator giminasiu[s] Arescu[sae]*.<sup>62</sup> The enclosure containing leopards maintained by Aurelius, assuming it was located somewhere near the findspot of the inscription, would be easily accessible via the Guadalquivir to animals coming from both the coast and further inland. One of the primary functions of the enclosure may have been to act as a 'way-station' for African animals on their way elsewhere. Theoretically, it could also have served as a staging-post for various animals captured in the Spanish hinterland and on their way to other provinces.

The animal-pen in question may well have contained other animals besides leopards. The relatively humble function of gymnasium attendant (*denudator*) also performed by Aurelius suggests that he may have held a relatively low post in the administration of the animal-enclosure as well. If the enclosure, as well as the gymnasium, were owned by the same Arescusa mentioned in the inscription, one could perhaps see Aurelius as one of her employees. It seems quite plausible that an official in overall charge of the *vivarium* supervised other individuals, including Aurelius, entrusted with the care of different varieties of animals: such a situation

would mirror the division of responsibilities amongst officials in Italy such as the *procurator ad elephantos* and *adiutor ad feras*.

### *The Care and Training of Captured Animals:*

Once the various animals had been captured, or had safely arrived at their enclosures, it was the responsibility of other personnel, the *mansuetarii*, to tame and train them for the arena. A variety of techniques were used to achieve this purpose.<sup>63</sup> Both Pliny and Aelian record starvation as a normal means of reducing captured elephants to submission, while Martial suggests that lions were routinely beaten by their trainers (*verbera securi solitus leo ferre magistri...*).<sup>64</sup> A relief from Florence depicts a similar means of pacifying a bear: the instruments held by the trainer in this scene are a whip and bait. Trainers, however, were not always cruel to animals in their care: far gentler devices such as musical instruments could also be used to 'soothe the savage beast'.<sup>65</sup> Certainly animals on occasion could become quite attached to their trainers, as illustrated by Seneca's anecdote of the lion defending its former *magister* from the other animals in the arena.<sup>66</sup>

Under the imperial administration, animal-trainers could be imported along with their charges, on occasion, in order to teach them various tricks in their enclosures. Strabo records that the Tentyritae were brought to Rome from Egypt for one of Augustus' spectacles because of their expertise in handling crocodiles.<sup>67</sup> Seneca adds the *topos* of an Ethiopian training an elephant to walk the tight-rope: *...elephantum minimus Aethiops iubet subsidere in genua et ambulare per funem*.<sup>68</sup> Martial also records the presence of an African(?) elephant along with his imported trainer, certainly African (Ethiopian?), at an imperial spectacle: *...et molles dare iussa quod choreas nigro belua non negat magistro...*<sup>69</sup>

Although specific evidence for the care of animals within enclosures is lacking, a curious mosaic from Roman Africa (whose exact provenience is

unfortunately unknown) may relate to the raising of young animals by the Romans. Undoubtedly, many juvenile as well as adult animals were captured for the *venationes*: for example, various ancient sources agree that the Romans preferred to capture young rather than adult tigers.<sup>70</sup> The mosaic in question depicts a she-ass, evidently in some duress, suckling a pair of small lion cubs (Fig. 12). Although it has been suggested that this scene represents some sort of arena spectacle, the vegetation in the scene suggests instead an outdoor setting. One alternative interpretation of the scene is that it represents the feeding of captive young animals with milk from a surrogate parent. The milk of a she-ass, although not as rich as that of a lioness, would be sufficient to feed lion cubs until they were weaned: in many modern zoos dogs' milk is used for the same purpose.<sup>71</sup>

Asses' milk was evidently highly valued among the Romans, which may explain why they would have used it for lions, and perhaps other exotic animals. Varro states that animals fed on barley, such as the ass, produce the most nourishing milk, and adds that the purgative effect of asses' milk is second only to that produced by mares.<sup>72</sup> Pliny comments that asses' milk, the thickest of all such liquids, could even be substituted for rennet: its thickness was perhaps one reason it may have been considered suitable for wild animals.<sup>73</sup> Both Pliny and Juvenal note the practice of bathing in asses' milk among wealthy Roman women.<sup>74</sup> This noble connotation may have been another reason it was deemed appropriate for the 'king of beasts'.<sup>75</sup>

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Notes:

<sup>1</sup> CIL 6, 8583: Juvenal, 12, 102-07: Sabbatini Tumolesi (1988) 24-25.

<sup>2</sup> Herodian 2, 11, 9.

<sup>3</sup> Aelian, *De Natura Animalium*, 2, 11: Toynbee (1996) 47. According to Loisel, a separate enclosure was even located in nearby Tivoli for sick elephants: see Loisel

(1912) 102.

<sup>4</sup> *AE* 1971, 68: Sabbatini Tumolesi (1988) 24; Fora (1996a) 29; Bertrand (1987) 231: for the use of camels in the Roman games, see Kolendo (1969) 292-93.

<sup>5</sup> Bertrand (1987) 223-26.

<sup>6</sup> Loisel (1912) 102.

<sup>7</sup> On modern maps, the area of ancient Laurentum is sometimes designated as *Tenuta di Caccia* ('Hunting Ground'), which suggests either that it continued to be used for hunting-preserves long after the Roman period, or that its use by the Romans has been remembered by popular tradition up to the present day.

<sup>8</sup> CIL 6, 10209: Suetonius, *Gaius*, 27: Sabbatini Tumolesi (1988) 25.

<sup>9</sup> CIL 6, 10208: Sabbatini Tumolesi (1988) 25-26.

<sup>10</sup> Bertrand (1987) 231-32.

<sup>11</sup> Suetonius, *Caligula*, 27, 1.

<sup>12</sup> Bertrand (1987) 232.

<sup>13</sup> Bertrand (1987) 227; Frank (1959) Vol. 4; 117.

<sup>14</sup> Trajan is said to have had slaughtered 11,000 animals during the games celebrating his Dacian triumph (Dio, 68, 15), while an inscription of 120 A.D. records the slaughter of 2,246 animals as part of the games lasting between April 18 and May 25 (CIL 14, 4546); Fora (1996a) 42-43; Toynbee (1996) 21-22.

<sup>15</sup> Some of the wide variety of animals examined and/or dissected by Galen in the mid-second century, such as bears, Barbary apes, and ostriches may well have been housed in such a structure, although this is admittedly mere conjecture: see Scarborough (1985) 123-24; 132, n. 6; Singer (1956) xxi.

<sup>16</sup> Procopius, *Bellum Gothicum*, 1, 22-23; Platner and Ashby (1929) 582-83; Lanciani (1979) 385.

<sup>17</sup> Jennison (1937) 175.

<sup>18</sup> Herodian [1, 15, 4] mentions seeing paintings of exotic animals sometime prior to Commodus' *venationes* in the Colosseum: were the Porta Praenestina paintings the ones seen by Herodian, or were they perhaps commissioned by Commodus to commemorate the large number of animals brought to Rome for his spectacles?

<sup>19</sup> Jennison (1937) 175-76; Lanciani (1990a) 277-78.

<sup>20</sup> For the traditional placement of the *vivarium*, see Platner and Ashby (1929) 582.

<sup>21</sup> Richardson (1992) 432.

<sup>22</sup> For the dating of similarly composed artwork in other media see Dunbabin (1978) 34-35, and Lehmann (1990) 37. If, as will be argued below, the enclosure to which these paintings belonged was constructed no earlier than the reign of Aurelian, such a date for the paintings would be perfectly reasonable.

<sup>23</sup> Other evidence for Indian elephants employed in the Roman games includes, for example, the scene of an Indian elephant being loaded onto a ship in the Great Hunt mosaic from Piazza Armerina, as well as a poem from the *Anthologia Latina* [195], which states that ...*diues nostris India misit [elephants] oris*.

<sup>24</sup> *AE* 1973, 39. Unfortunately, both the cognomen and legion of this individual have not been preserved in the extant inscription.

<sup>25</sup> CIL 6, 130: Sabbatini Tumolesi (1988) 26.

<sup>26</sup> Bomgardner [(2000) 24] suggests that, for example, the urban cohorts stationed at Lyons and Carthage were involved in supervising the transport of animals captured in the northwestern provinces and Africa.

<sup>27</sup> CIL 6, 33990: *SHA, Antoninus Pius*, 10, 9: Sabbatini Tumolesi (1988) 87-88.

<sup>28</sup> For such veterinarians see e.g. ILS 9071.

<sup>29</sup> Lanciani (1990a) 277-78; Lanciani (1979) 75, 383-84; Jennison (1937) 175.

<sup>30</sup> Richardson (1992) 432.

<sup>31</sup> For the dismantling of the Praetorian Guard and their barracks, see Richardson (1992) 78-79.

- <sup>32</sup> Lanciani's plan of the Castra Praetoria and surrounding area [*Forma Urbis Romae*, Pl. 11] indicates that the western wall of the nearby *vivarium* was the Aurelian wall, thereby suggesting that the layout of the earlier enclosure was altered to mesh with it. Assuming Lanciani's plan is at all accurate, it therefore indicates that this *vivarium* was still in use up until the reign of Constantine.
- <sup>33</sup> Jennison (1937) 175; Toynbee (1996) 20, 345, n. 30.
- <sup>34</sup> Pliny, *NH*, 8, 14; Loisel (1912) 100.
- <sup>35</sup> Tertullian, *Ad Martyres*, 5; John Chrysostom, *Hom. in Matth.*, 28, 5; Libanius, *Or. Artemis*, 14.
- <sup>36</sup> John Chrysostom, *Hom. in Matth.*, 59, 6.
- <sup>37</sup> Libanius, *Epistulae*, 218-19: *PLRE*, Vol. 1, "Eusebios 15", 303-04; Liebeschuetz (1959) 117.
- <sup>38</sup> The wooden circular structure at the Lunt Roman fort in England may have been an animal enclosure of some sort (see page 185).
- <sup>39</sup> Demandt (1989) 327, n. 15; Wightman (1970) 170; Cüppers (1984) 288-90.
- <sup>40</sup> Cüppers (1984) 290; Wightman (1970) 170.
- <sup>41</sup> Wightman (1970) 170.
- <sup>42</sup> Wightman (1970) 170-71; Cüppers (1984) 290-91.
- <sup>43</sup> Ammianus Marcellinus 31, 10, 18-19; Heinen (1985) 290.
- <sup>44</sup> For Nero's game preserve, see Suetonius, *Nero*, 31, 1: For Domitian's Alban estate, see Suetonius, *Domitian*, 4, 4; Juvenal 4, 100; Jennison (1937): 135; Anderson (1985) 100-01.
- <sup>45</sup> Pliny, *Panegyricus*, 81, 3.
- <sup>46</sup> Fronto, *Ad M. Caes.*, 3, 21.
- <sup>47</sup> Pliny, *Epistulae*, 6, 31.
- <sup>48</sup> *SHA*, *Commodus*, 8, 5; *Tres Gordiani*, 33, 1, 2; Toynbee (1996) 16, 22. The meaning of the term *arcoleontes* (or *argoleontes*) in the latter text of the *SHA* is unclear: suggestions have ranged from white to wild, or even exceptionally large, lions. See Merten (1991) 146, n. 35.
- <sup>49</sup> Lactantius, *De mortibus persecutorum*, 21, 5, 6; Keller (1913) Vol. 1; 179.
- <sup>50</sup> Jennison (1937) 136.
- <sup>51</sup> Julian, *Orationes*, 53B; Demandt (1989) 327.
- <sup>52</sup> Ammianus Marcellinus 29, 3, 9.
- <sup>53</sup> Sozomen 7, 25, 10-12. The *SHA* records that both Lucius Verus and Elagabalus also staged private *venationes* and gladiatorial combats at their banquets, although one or both of these anecdotes may well be fictitious: see *Verus* 4, 9; *Elagabalus* 25, 7-8; Ville (1981) 290-91.
- <sup>54</sup> Ammianus Marcellinus 31, 10, 19; Jennison (1937) 136.
- <sup>55</sup> Philostorgios 11, 1; Keller (1913) Vol. 1; 179.
- <sup>56</sup> Pliny, *NH*, 8, 78; Bertrand (1987) 222, 230: For the lion of Macrinus see *SHA*, *Diadumenos*, 5, 6. Although both ancient and modern sources tend to use the term *vivarium* indiscriminately in referring both to 'private zoos' maintained by wealthy Romans (i.e. Hortensius) and more 'utilitarian' enclosures built for animals en route to the games, for the purposes of this paper, I shall use the term only in denoting those structures maintained for personal enjoyment by Roman aristocrats and emperors.
- <sup>57</sup> Libanius, *Orationes*, 33, 21.
- <sup>58</sup> Basil, *Homilia in Luc.*, 3; Wiedemann (1995a) 159.
- <sup>59</sup> Justinian, *Digest*, 7, 1, 62; Lanata (1998) 70.
- <sup>60</sup> E.g. Gaius, *Institutes*, 2, 15-16; Justinian, *Digest*, 9, 2, 2.
- <sup>61</sup> Loisel (1912) 100-101.
- <sup>62</sup> CIL 2, 6328: *AE* (1891) 43.
- <sup>63</sup> Loisel (1912) 110-11.

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<sup>64</sup> Pliny, *NH*, 8, 9; Aelian, *De Natura Animalium*, 10, 10; Martial, *Epigrams*, 2, 75.

<sup>65</sup> Cougny and Saglio (1962) 695-96.

<sup>66</sup> Seneca, *De Beneficiis*, 2, 19.

<sup>67</sup> Strabo 17, 1, 44.

<sup>68</sup> Seneca, *Epistulae Morales*, 85, 41.

<sup>69</sup> Martial, *Epigrams*, 1, 104.

<sup>70</sup> See, for example, Pliny, *NH*, 8, 24.

<sup>71</sup> Private communication, Richard Johnstone, Education Coordinator, Metro Toronto Zoo.

<sup>72</sup> Varro, *De Re Rustica*, 2, 8, 4; 11, 1-2.

<sup>73</sup> Pliny, *NH*, 11, 96.

<sup>74</sup> Pliny, *Ibid*: Juvenal, 6, 468-69.

<sup>75</sup> Lions appear to have been relatively revered animals in antiquity. For example, the lion was commonly associated with deities like Cybele, as well as mythological heroes like Heracles, and a number of emperors chose to depict lions on their coinage, presumably because of the latter's own 'regal connotations': see Toynbee (1996) 63-64; Sear (2000) 55.



### Performers and Spectacle in the Arena

The animal spectacles of imperial Rome were not all identical. Events ranged from those in which most, if not all, of the participating beasts were slaughtered, to those in which the men involved were in far more danger than the animals. Like the spectacles themselves, the humans participating in them were not all of one type. Certain performers (*venatores*) specialized in fighting various types of beasts, while others were merely proficient in evading their attacks. In this section we shall first of all look at the different types of animal events enjoyed by the Romans, followed by a closer examination of the humans taking part in such spectacles.

#### *The Proludia:*

A few Greek inscriptions of the Roman period, from the cities of Pinara and Xanthos, use the term προκυνήγια to describe some sort of specialized animal-spectacle.<sup>1</sup> Unfortunately the exact meaning of this term is unclear. One might think that the word is a variant of the more usual κυνήγιον (beast-hunt), like θεατροκυνηγέσιον, and that the preposition προ- is merely used to specify that the hunt took place *in front of* an audience. The fact, however, that the terms κυνήγια and προκυνήγια are used together in the Pinara inscription speaks against this.

Two apparent synonyms for the word προκυνήγια are *prolusio* and *proludium*, used by Roman writers. The first of these terms is described by Cicero, in connection with 'Samnite' gladiators brandishing their spears, as an event which leads...*non ad volnus, sed ad speciem*. Ovid also makes an apparent allusion to the *prolusio* of the arena: ...*petit primo plenum flaventis harenae nondum calfacti militis hasta solum*... Ville suggests that the *prolusio* may have involved a non-violent demonstration of weapon-skills prior to actual combat in the arena.<sup>2</sup> Symmachus, however, also mentions Irish wolfhounds being admired on the *praelusionis dies*, which suggests

that such an event could also involve an exhibition of exotic animals prior to the main spectacle.<sup>3</sup>

The use of *proludium* by Ammianus suggests also that its cognate προκυνήγια was some sort of exercise preparatory to the actual *venatio*. On two occasions Ammianus refers to the *proludium* in connection with military exercises (*...proludia exercitus, ...proludia disciplinae castrensis*), while on a third he mentions *proludia* in the sense of preliminaries undertaken before any serious business (*....in prolu-diis negotium spectaretur*).<sup>4</sup> A third century curse tablet from Carthage's amphitheatre indicates that the *proludium* was also the name of some sort of arena spectacle: the fragmentary curse in question asks for a certain *venator* to be injured even in the *proludium*.<sup>5</sup>

Given the foregoing evidence, we can assume that the προκυνήγια, or *proludium/prolusio* consisted of an entertaining but non-lethal (to the *venator* at least) routine performed in the arena before the regular beast-hunt or spectacle. Wunsch suggests that the event in question may have involved the slaughter of relatively harmless chained animals by *venatores*, such as the combat with a chained panther depicted on a relief from Pompeii. It should be noted, however, that any combat involving such a dangerous animal as a panther perhaps belonged to a *venatio* proper rather than any sort of preliminary spectacle.<sup>6</sup> Alternatively the *proludium* may have consisted of the exhibition to the crowd of the animals involved in the forthcoming *venatio*, or perhaps a simple practice exhibition of weapon skills by the *venatores*.

A relief from the tomb of Ampliatus(?) in Pompeii may depict a *proludium*: above a *venatio* scene proper, including a bear and a bull, five much less dangerous animals, two rabbits, two dogs, and a deer, are shown.<sup>7</sup> It is possible that a preliminary combat involving these relatively harmless creatures was staged in order to whet the audience's appetite prior to the appearance of the professional *venatores* and their far more lethal opponents. The scene of a dwarf in combat with a

boar from the early second century Zliten mosaic may also signify a spectacle staged for "...light relief..." prior to the more 'serious-minded' gladiatorial and animal events.<sup>8</sup>

#### *Venationes:*

The most popular animal spectacles in the Roman empire were *venationes*, or staged beast-hunts, resulting in the death of some or all of the animal and human participants. A variety of different terms were used to denote these events throughout the empire. While the majority of Latin inscriptions commemorating animal combats in the arena did so by denoting them as *venationes*, the terminology used for such events in Greek inscriptions was more varied, showing the different forms they could take.<sup>9</sup> In the Greek world, the combat between *venatores* and various animals within the arena was generally called a κυνηγέσιον, although variant forms of this term, such as κυνήγιον, are also attested. Combat between animals alone was evidently denoted by the term θηριομαχία. Inscriptions such as that found in Oinoanda, which mentions both κυνηγεία and θηριομαχίας, indicate that both types of events could be included as part of the same spectacle.<sup>10</sup>

One measure of the popularity of *venationes* is the relative frequency of their portrayal, as compared to other types of spectacles, in Roman art. For example, the relatively small number of Roman coins and medallions depicting scenes from the *munera*, such as one of Gordian III (238-44) with a fight between a bull and rhinoceros, all show *venationes* rather than gladiatorial scenes.<sup>11</sup> Paintings and mosaics from throughout the empire also depict far more hunting than gladiatorial scenes, particularly in the eastern half of the empire. Beginning in the third century, Roman mosaics usually omit gladiatorial scenes in favour of chariot-racing and hunting scenes.<sup>12</sup>

As various pieces of epigraphic and literary evidence indicate, *venationes* were not confined to large cities like Rome, but were popular enough to be staged in smaller centers throughout the empire. Not surprisingly, the scale of beast-hunts staged in cities like Pompeii was decidedly more modest than that of events in the capital: the number of animals slaughtered at individual *venationes* in smaller towns does not appear to have been very large.<sup>13</sup> Except in cases where inscriptions indicate the number of days a particular beast-hunt lasted, one can assume that such events were staged on a single day: in most cases, apart from major centres like Antioch, the smaller cities of the empire would not have had the resources to procure the large number of animals needed for a multi-day *venatio* like those staged by the emperors in Rome.<sup>14</sup>

To judge from the artistic evidence, beast-hunts were particularly popular events in the cities and towns of Roman North Africa. The majority of 'spectacle-mosaics' from the region, particularly from the Severan period onward, depict *venationes*. These beast-hunts may well have been as popular with the individuals staging them as with spectators. Since a large number of animals used in the *venationes* were native to Africa, local *editores* likely found beast-hunts cheaper to stage than gladiatorial contests, and therefore increasingly concentrated on the first type of spectacle as time went on.

A large number of North African mosaics commemorate *venationes* staged by local *editores*: these depictions are amongst the most important pieces of evidence for the size and scale of beast-hunts staged outside of Rome. A Flavian mosaic from Zliten (Fig. 13), as well as the late second century mosaic from the Domus Sollertiana in El Djem (Fig. 14), suggest that African *editores* in particular could procure a relatively large variety of animals for their spectacles.<sup>15</sup> Apart from gladiatorial combat, the Zliten mosaic depicts *venatores* in combat with such animals as wild goats, asses, and stags, as well as condemned criminals being exposed to leopards and lions.<sup>16</sup> Like the

Zliten mosaic, that of the Domus Sollertiana depicts a spectacle in the arena involving a variety of different animals, including leopards and bears.<sup>17</sup>

Another mosaic illustrating a 'typical' North African *venatio* is that found at Le Kef, dating approximately to the mid-third century (Fig. 15). The mosaic depicts twenty ostriches and approximately the same number of deer enclosed by circular netting. Hunters about to loose dogs upon this collection of animals stand ready at the three openings to the enclosure. The relatively small number and variety of animals in the scene, as well as the unusual depiction of the moment before combat, rather than the combat itself, suggest that the mosaicist was commissioned to show a particular spectacle put on by his patron, rather than a generic (and imaginary) *venatio* scene.<sup>18</sup> The small scale of this particular spectacle is further indicated by the apparent lack of arena *venatores*: evidently it merely consisted of dogs, ostriches, and deer killing each other in the arena.

On occasion, other *editores* would provide additional information to posterity by denoting the actual number, or even names, of different animals involved in the *venationes* commemorated by their mosaics. An early fourth century mosaic from Radez in Tunisia depicts a combat involving several types of animals, including bears, boars, bulls, and an ostrich (Fig. 16). Several animals are given names, such as the bears labelled Simplicius and Gloriosus. The single bull shown in the mosaic does not bear a name, but rather the letter N and the number XVI.<sup>19</sup> This notation likely indicates that 16 bulls took part in the *venatio* commemorated by the mosaic.<sup>20</sup> A mosaic of similar date from Tebessa, commemorating a *venatio* and athletic contest, also assigns numbers to several of the depicted animals, including eight boars, two gazelles, ten bulls, and eighteen bears.<sup>21</sup>

A mid-third century mosaic fragment found in Carthage also records the number of animals employed in a particular *venatio*: the animals depicted include a bull, leopards, boars, antelopes, bears, sheep, ostriches, and stags (Fig. 17). Several of the depicted animals have inscriptions of *N[umero]* followed by Roman numerals,

indicating how many belonging to these particular species participated in the illustrated *venatio*: in this instance 70 bears, 16 wild sheep, 15 antelopes, and 25 ostriches.

The mosaic is also bisected by a vertical line of three millet stalks. The fact that some animals, such as the bears and wild sheep, are labelled with a different set of numbers on either side of the millet stalks may indicate that the stalks are meant to separate two separate days of the spectacle represented by the mosaic: thus, 40 bears and 10 wild sheep were exhibited on one day, 30 bears and six wild sheep on the other. The inscription MEL QUAESTURA (*melius quaestura*) found on the mosaic presumably indicates that, at least in the mosaic patron's mind, his multi-day spectacle was better than those staged by the provincial quaestors.<sup>22</sup>

#### *Animals as Spectacle:*

Although most of the animals brought to the games were slaughtered as part of the proceedings, on occasion they were merely displayed rather than killed. Pliny suggests that a *pyrricha* of performing animals such as bears and elephants was often part of the morning's *venationes*.<sup>23</sup> Less dangerous animals, like camels and monkeys, could also be introduced into such non-violent events.<sup>24</sup> These *pyrrichae* often included non-violent reenactments of mythological tales, as opposed to the fatal reenactments sometimes used for executions in the arena.<sup>25</sup>

As Jennison notes, a number of the animals at any given *venatio*, in particular those that fought well, could be spared at the end of the spectacle so as to be able to entertain the crowd again on another occasion. The arena lion mourned by Statius was obviously a veteran of more than one *venatio*: *...abire domo rursusque in claustra reverti suetus...*<sup>26</sup> We know from Martial that popular arena animals, like gladiators, could also on occasion be granted *missio* by the *editor* of the spectacle.<sup>27</sup>

A late third or early fourth century mosaic from El Djem depicts a *spectaculum* which at least some of the animals involved could expect to survive. A number of *venatores* are shown engaged in combat with various wild animals, including a leopard, bull, and bear. The most dangerous weapon wielded by any of the performers is a whip, while others attempt to overcome their opponents with lassoes or even bare hands. Not surprisingly, given this lack of armament, two of the *venatores* in the scene are wounded. The sistrum-shaped brand on the bull in the scene, which has been identified as a mark identifying animals belonging to a specific troupe of *venatores*, suggests that the mosaic depicts a public spectacle rather than the breaking in of such animals prior to their use in the arena.<sup>28</sup>

Although as a rule the slaughter of animals at particular *spectacula* was evidently much greater under the empire than it had been during the Republic, non-violent animal displays did continue under the Roman emperors. Plutarch, writing in the early second century, records that the imperial spectacles offered many examples of the εὐμαθεία and εὐφύια of wild animals.<sup>29</sup> Amongst the prizes distributed to the audience by Nero at his *Ludi Maximi* were various *mansuetae ferae*, probably animals which had been trained to perform tricks at spectacles.<sup>30</sup>

Evidently one of Martial's favourite spectacles was a lion trained to allow hares to climb into its mouth and back out again unharmed.<sup>31</sup> The appearance of animals trained to perform tricks in imperial *spectacula* was certainly not an indication of increasing 'tender-heartedness' on the part of the Romans, but was more likely introduced to add more variety and interest to the animal events in the Colosseum and elsewhere.<sup>32</sup> Apart from the lion witnessed by Martial, Plutarch also records horses and steers taught to perform dances or specific poses for an audience.<sup>33</sup> The fact that such spectacles are said by Plutarch to occur ἐν θεάτροις suggests that they were relatively common outside Rome. Perhaps these displays were staged by smaller communities who could not afford to hire out trained elephants or lions for their own *spectacula*.

The writings of Libanius also support the notion that, at least in the later empire, exotic animals were not always slaughtered in the arena. In one of his orations Libanius mentions the bears, leopards, and beast-hunters brought for a *spectaculum* to Antioch from the nearby town of Beroea, adding that the animals and human performers had previously alternated in defeating each other in the arena, which suggests that their contests were non-lethal.<sup>34</sup> In another speech, Libanius complains about the turmoil caused in Antioch by various entertainers, including those with tame lions, bears, dogs, and apes. Although Libanius does not specify exactly where such animals and their trainers performed in the city, it is possible that at least some of them may have performed various tricks in the arena.<sup>35</sup>

#### *Arena Acrobats:*

Certain performers at *spectacula* were not beast-hunters proper, but instead acrobats who entertained the crowd by evading the attacks of various animals, much as modern-day rodeo clowns. Although non-violent animal displays occurred in the early empire, events involving acrobats were especially common in the late empire, perhaps as a cost-saving measure: the animals employed in such events could be reused in subsequent *spectacula*. The popularity of such entertainers can be measured by the relatively frequent references to them in late antique literature.<sup>36</sup>

One class of these performers used wooden poles to evade animals in the arena. The *Corpus Glossariorum Latinarum* refers to them as *salitores*, πηδηταί, and άλμαστισταί.<sup>37</sup> The *Anthologia Graeca* also contains a reference to one of these acrobats, an individual who somersaulted over an onrushing animal by means of a pole fixed in the arena floor and thereby escaped it.<sup>38</sup> The fact that the audience loudly applauded this man's exploit suggests of course that it was an 'approved' routine: the person in question was not merely a frightened (and lucky) *venator* trying to escape injury. Since he is described as a θηριομάχης, however, the epigram's



subject may have been a lightly-armed beast-hunter able to perform such acrobatics in the course of combat, rather than a *salitor* in the strict sense of the term, unless the author of the epigram is using imprecise terminology. The *salitores* were apparently not expected to kill any animals as part of their duties. Although there is no way of determining for certain, the animal involved in the epigram episode may well have been a bull, since, as has been seen, these animals often participated in events where *venatores* jumped onto their backs or actually rode them in combat.

Another reference to similar performers is contained in a letter from Theodoric to the consul Maximus composed in 522. One of the athletes in the *venatio* outlined by Theodoric is described as using a wooden pole to leap over unspecified onrushing animals:

The first hunter, trusting to a brittle pole, runs on the mouths of the beasts, and seems, in the eagerness of his charge, to desire the death he hopes to avoid. They rush together with equal speed, predator and prey; he can win safety only by encountering the one he hopes to escape. Then the man's bent limbs are tossed into the air like flimsy cloths by a lofty spring of his body; a kind of embodied bow is suspended above the beast; and, as it delays its descent, the wild beast's charge passes beneath it.<sup>39</sup>

Prudentius, writing at a somewhat earlier date, confirms the impression derived from Theodoric's letter that such acrobatic displays were common in late imperial animal *spectacula*. In his work on the origin of sin, Prudentius claims that the madness of the mob is responsible for the fact that...*feras volucris temeraria corpora saltu transiliunt mortisque inter discrimina ludunt*.<sup>40</sup>

Several representations of such 'animal acrobats' survive from the ancient world. Often perches in the arena used by the acrobats for their dangerous manoeuvres are included in such works as the wall-painting found in Corinth's theatre, showing a man employing such a device to leap onto a leopard's back.<sup>41</sup> The diptych of Areobindus, manufactured in Constantinople in 506, depicts a scene similar to that described in Theodoric's letter to Maximus: an individual grasping a pole is shown at the apex of his vault, just preparing to execute a front flip, while an enraged bear beneath lunges at him.<sup>42</sup> A similar depiction is included in the arena

scene from the Sofia relief, dating to the early fifth century, as well as one of the later Anastasius diptychs (Fig. 18).<sup>43</sup> A contorniate medallion from the later empire depicts a woman using a pole to execute a back-flip over an onrushing lion.<sup>44</sup> This pictorial evidence, as well as the mention of the fixed pole in the θηριομάχης epigram just cited, suggests that such acrobatics were not mere ‘diversions’ staged as part of the larger (and more bloody) *venationes*, but may have been full-fledged spectacles in their own right: the *salitores*, with their poles and perches, likely would have hindered the conventional beast-hunters if they were both in the arena simultaneously.

In the case of depictions showing men flipped in mid-air over various creatures, it is sometimes difficult to decide whether the person is a *salitor* or an unfortunate *venator*. Robert suggests that the person depicted falling backwards over a bear in the Apri relief (Fig. 19) might be one of the former executing a back-flip, but to judge by his shield, he seems more likely to have been an unsuccessful beast-hunter being rammed by the bear.<sup>45</sup> Another unarmed man flipping over a bear in one of the Kibyra reliefs, however, may well be a *salitor*: the fact, at least, that he is clothed suggests that he is an arena performer rather than a criminal condemned *ad bestias*.<sup>46</sup> A final relief from Ephesus also appears to depict a *salitor* in action. On the left of the scene, an individual, holding a *mappa*, appears to be provoking a bear rushing towards him. Above the bear, another unarmed performer is shown performing a flip over the enraged animal (Fig. 20).<sup>47</sup>

Another unusual specialist who occasionally took part in animal *spectacula* was the δένδροβάτης or *arborarius*, listed in the *Codex Glossariorum Latinorum* as one of the performers who participated in amphitheatre events.<sup>48</sup> A passage from the *Scriptores Historiae Augustae* may allude to the participation of these or very similar specialists in events staged at the Colosseum. Probus is said to have had trees planted in the floor of the Colosseum for one of his *venationes*, which could have been done either to make the beast-hunt seem more ‘natural’ to the audience or to allow for the

inclusion of δενδροβάται in the spectacle.<sup>49</sup> Such performers were evidently a class of combatants who climbed trees set in the arena floor in order to escape an onrushing animal. The standard creature involved in this particular spectacle was the bear, an animal able to climb up the trees after its quarry; as Robert states, the sight of an animal like a bull vainly butting its head against a tree while the δενδροβάτης sat above in perfect safety would have been less than entertaining for audiences accustomed to more violent and dangerous events.<sup>50</sup> A relief from Narbonne evidently depicts a δενδροβάτης and his 'partner'. The central section of the relief depicts a *venator* and a bear, while the left hand side shows a tree trunk with inset rungs for the convenience of the climbers. Other arena scenes including trees, such as reliefs from Hierapolis and Aizanoi, may also allude to the presence of δενδροβάται at these *spectacula*.<sup>51</sup>

In the later empire yet another type of non-violent animal-display is recorded by the sources. The biography of Carus in the *Historia Augusta* records an event in which ...*exhibuit et toechobaten, qui per parietem urso eluso cucurrit, et ursos mimum agentes*...<sup>52</sup> Some debate has arisen about whether or not the latter event involved actual bears performing a mime, or only actors wearing bear costumes. In his *Metamorphoses*, Apuleius describes a gang of robbers sewing up one of their number into a bear-skin in order to disguise him as one of these animals. Because of Apuleius' detailed description of this process, at least one scholar has surmised that he was familiar with a well-known practice of putting actors into animal costumes to perform mimes, such as those mentioned in the biography of Carus.<sup>53</sup>

In the passage from Carus' life, however, the bear involved with the *toechobates* was certainly a real animal, and the same is to be assumed for the mime-performing bears also mentioned in the text.<sup>54</sup> Trained animals performed in *spectacula* at least as early as the late Republic, to judge by Varro's description of the Orpheus reenactment staged by Hortensius on his estate.<sup>55</sup> A *munus* staged by Germanicus in the Theatre of Marcellus is said to have featured elephants

performing such feats as dancing and tight-rope walking, while a performing dog greatly impressed Vespasian with its faked death-throes during one of his *spectacula*.<sup>56</sup> An elaborate spectacle relief from Sofia dating to the fifth century depicts both costumed monkeys (or actors wearing ape-masks?) and a small bear, the latter evidently performing as a beggar.<sup>57</sup> Performing bears are definitely attested by both Martial and Apuleius. The former author records, amongst other animals, reined Libyan bears at an imperial spectacle, while the latter describes a bear dressed as a Roman matron and carried in a sedan chair as part of a procession dedicated to Isis.<sup>58</sup>

The *toechobates* referred to in the biography of Carus, was, as the name suggests, a performer who attempted to elude a maddened bear by climbing a wall in the arena. Like the bear-mime, this event, if all went as planned, was also intended to be non-violent, at least for the animals involved.<sup>59</sup> Several apparent representations of such an event are preserved for us on a number of late antique diptychs, including that manufactured for the consul Areobindus in 506, which depicts a bear seizing the ankle of a man appearing to climb up what Toynbee interprets as a wall made of ashlar masonry. Alternatively, this structure has been identified as a cage for the animals.<sup>60</sup>

### *Marine Spectacles:*

Apart from 'terrestrial' events, the Romans also periodically staged marine *spectacula* involving various animals throughout the empire. In 58 BC the aedile Marcus Scaurus exhibited five crocodiles and a hippopotamus to the Roman populace in a temporary pool he had built for the occasion. Ammianus Marcellinus suggests that exhibitions of hippopotami such as that staged by Scaurus were not at all uncommon subsequently: *...per aetates exinde plures [hippos] saepe huc ducti...*<sup>61</sup> Augustus is said by Strabo to have initially displayed an unspecified number of

crocodiles in the Circus Maximus, while later in 2 BC 36 other crocodiles (perhaps in fact the same as those displayed earlier) were killed in the flooded Circus Flaminius.<sup>62</sup>

Calpurnius Siculus records a display of seals and hippopotami in a flooded amphitheatre, most likely during Nero's reign.<sup>63</sup> Suetonius and Dio, likely referring to the same occasion in AD 57, mention an imperial *naumachia* in an unnamed theatre, in which the water was stocked with fish as well as various other marine creatures.<sup>64</sup> Various animals, both marine and terrestrial, were also positioned in and around Agrippa's *stagnum* in the Campus Martius during the obscene 'floating banquet' which the praetorian prefect Tigellinus staged during Nero's reign.<sup>65</sup> Pliny, writing of seals, suggests that displays of such animals were not uncommon in his day: *...accipiunt...disciplinam, voceque pariter et nisu populum saluant, incondito fremitu nomine vocati respondent.*<sup>66</sup>

Such marine events were evidently a favourite of the emperor Titus. As part of the games inaugurating the Colosseum, Titus put on a lavish *spectaculum* in the *Stagnum Augusti* including 5000 animals of various types. A deck was apparently built just under the surface of the water in order to allow terrestrial animals to wade into the *stagnum*, since, as Martial states in reference to this occasion, *...uidit in undis et Thetis ignotas et Galatea feras.*<sup>67</sup> A somewhat similar *spectaculum* was also staged by Titus in the Colosseum itself, which involved horses, bulls, and various other domestic animals performing in shallow water "dressage" maneuvers which they had originally learned on dry land.<sup>68</sup>

Subsequent emperors also staged aquatic *spectacula* on occasion, although, as far as the evidence suggests, not on the same scale as those of Titus. Antoninus Pius is said to have exhibited a wide variety of animals during his reign, including hippos and crocodiles. The latter animals were undoubtedly displayed in some sort of shallow temporary basin, likely in one of the venues used by earlier emperors.<sup>69</sup> The same facility(s) may well have been used by Commodus later in the century: amongst the numerous animals personally slain by this emperor were five hippopotami.<sup>70</sup>

The SHA also records a number of third century emperors who apparently included aquatic animals in their *spectacula*, or at least in their own private menageries. Amongst the animals kept by Elagabalus in Rome were a crocodile and an unspecified number of hippopotami, while Philip the Arab included six hippopotami in the lavish events staged during his reign.<sup>71</sup> Another passage from the SHA credits the pretender Firmus with swimming amongst crocodiles and riding a hippopotamus, but the veracity of this particular anecdote appears highly suspect.<sup>72</sup>

A number of inscriptions suggest that aquatic *spectacula* were also popular in North Africa at this date. An inscription from the theatre at Lepcis Magna, recording various alterations made by the current proconsul, mentions a *lacuna*. While this term has previously been thought to refer to the cavea, Traversari speculates that it may in fact pertain to a basin in the orchestra of the theatre, suitable for staging various aquatic events.<sup>73</sup> The same term, evidently denoting the same structure as at Lepcis Magna, is also contained in a fragmentary Severan inscription from the theatre at Sabratha.<sup>74</sup>

An inscription from the circus at Mérida, dated to between 337 and 340, records that the current *comes* of Spain(?), amongst other alterations, had the facility filled with water (...*aquis inundari*...). Although it is quite unlikely that the entire circus was flooded for *naumachiae* or the like, this phrase may refer to the flooding of a certain section on occasion for smaller-scale events, perhaps including marine *venationes* or the display of animals such as crocodiles.<sup>75</sup>

Other literary evidence confirms that aquatic *spectacula* of this type continued to be popular in Rome and elsewhere at an even later date. In one of Symmachus' letters he states that ...*crocodillos functio theatralis efflagitat*..., which presupposes some sort of artificial pool or tank for such animals to fight or be displayed in, while in a second letter Symmachus asks Stilicho for imperial permission to fill a theatre with water, stating that such permission had often been granted in the past.<sup>76</sup>

### *Criminal Executions:*

Another common feature of the *munera* at Rome and elsewhere was the slaughter of criminals by wild animals after the animal *spectacula* proper, generally during the midday pause.<sup>77</sup> Such a time was ideal for those animals surviving the morning's events to be employed against felons condemned *ad bestias*.<sup>78</sup> This custom, like the *venationes* and animal displays proper, had precedents in the mid-Republican period; both Aemilius Paullus and Scipio Aemilianus in the second century BC are said to have punished Roman deserters by throwing them to the beasts as part of the *spectacula* they staged celebrating their respective victories over Macedon and Carthage. Paullus in fact learned the technique from the Carthaginians of trampling deserters to death with elephants.<sup>79</sup> Pliny records that Caesar started the practice, still common in his own day, of providing condemned criminals (*noxii*) with silver equipment for fighting the wild animals they were pitted against.<sup>80</sup> Other individuals later condemned *ad bestias* in the arena were forced to fight animals with their bare hands or to be fixed to posts as helpless prey.<sup>81</sup>

The latter form of execution involved a temporary fence being set up around the arena floor, inside which were placed the condemned person tied to a post and the cage containing the animal slated to execute the offender. The previously-loosened front of the cage could be safely opened through the posts of the fence with chisels and crowbars and then closed up again after the animal had made its exit. Often the terrified animal would refuse to leave its cage, or attempt to reenter it after stepping out, because of the noise of the crowd.<sup>82</sup>

Execution by wild animals was seen as an economical form of capital punishment when such animals were available. In 155 Polycarp was condemned to be burnt alive only because the *venatio* season in Smyrna was over for the year.<sup>83</sup> On certain occasions such executions were actually delayed until animals were

available.<sup>84</sup> An interesting aspect of the Polycarp episode is the fact that the proconsul in Smyrna thought lions were available for Polycarp's execution until informed of the contrary by the Asiarch: the latter officials, to judge by their knowledge of animal availability, were evidently far more concerned with the organization of the *venationes* than government officials like the proconsul.

This incident in Smyrna was certainly not the only occasion in the Greek east on which various animals were used to kill condemned criminals. More than one source mentions such executions as part of larger *spectacula* in Thessalonica and Amastris.<sup>85</sup> Although these particular episodes are fictional, they likely reflect contemporary events in which the sight of animals killing condemned criminals (καταδίκαι) was not at all uncommon. We know that Zeno, the chief priest of Aphrodisias, included μονομάχοι, ταυροκαθάπται, and καταδίκαι in one of his *spectacula*.<sup>86</sup> In addition, reliefs from Apri, Ephesus, and Smyrna also indicate that executions of criminals by animals were staged in those cities, at least on occasion.<sup>87</sup>

In the early empire condemnation *ad bestias* was used only against non-citizens, but in the later empire this punishment was employed even against citizens of low social standing.<sup>88</sup> It even appears to have been employed by private citizens against their slaves. The well-known episode of Augustus' dinner at the house of Vedius Pollio, when the latter tried to execute one of his domestics by throwing him into a pond full of lampreys, points to a tradition of at least some private citizens keeping animals in readiness to punish unruly slaves.<sup>89</sup> The repeated efforts of Roman legislation, such as the imperial rescripts of Marcus Aurelius and Constantine, to prevent the sale of slaves to the *venationes* by private citizens, indicate that Pollio was not alone in his choice of punishments for his underlings.<sup>90</sup>

These horrific executions in the arena were meant to provide a deterrent against crime for the spectators, as well as to humiliate the criminal in question. Because of the gulf in feeling between the humiliated criminal and the spectators, such executions also appear to have produced pleasure in the audience.<sup>91</sup> The



criminals involved in these spectacles appear to have elicited even less sympathy from the Roman public than gladiators.<sup>92</sup> On occasion those thrown to the beasts were rescued before being killed so that the audience could enjoy their mangling the next day as well.<sup>93</sup>

Some criminals, instead of being merely mauled by wild animals, were killed or tortured by them in various mythological reenactments. Such reenactments included 'Orpheus' being killed by a bear, 'Daedalus' being killed by a Lucanian bear, 'Pasiphae' being violated by a bull, 'Laureolus' being killed by a Scottish bear, and 'Dirce' being dragged by a bull.<sup>94</sup> It should nevertheless be noted that these mythological reenactments could also on occasion be non-violent: Apuleius, no doubt drawing upon actual events he had witnessed in the arena, describes a reenactment of the judgement of Paris, complete with goats and a wooden replica of Mount Ida, in Corinth's theatre.<sup>95</sup> The masts and rigging for the Colosseum's *velarium* was easily able to bear the weight of any large animal, such as a bull, if any of these reenactments required an animal to be lifted into the sky on ropes.<sup>96</sup>

As might be expected, the attendants handling the animals in preparation for arena executions and other events were often themselves in great danger. The famous Zliten mosaic shows attendants armed with whips pushing those condemned *ad bestias* out into the arena, so that they could protect themselves from being mauled by the animals. Pushing the animals up the ramps under the Colosseum floor was particularly hazardous, as were impatient emperors: Suetonius recounts how Claudius had incompetent animal attendants thrown into the arena themselves. Martial also records how even a supposedly tame animal could turn on unsuspecting attendants.<sup>97</sup>

#### *Animal Disposal:*

One final aspect of the animal *spectacula* which scholars have not thoroughly addressed is the fate of the animal carcasses after a given event, despite the fact that

"...dead beasts had not outlived their usefulness to Rome."<sup>98</sup> Some animal carcasses, both in Rome and the provinces appear to have been buried in pits or deposited in arena substructures, but this was obviously not the case with all such remains.<sup>99</sup> One possible use of relatively fresh animal-carcasses, be they from the animal-enclosures in Rome or the Colosseum, would have been as food for the remaining wild animals in the city. Such meat, for example, would have been ideally suited for scavenging animals such as lions.<sup>100</sup>

Although Kyle discounts the possibility that certain arena animals could be fed the meat of their 'fallen comrades', stating that no literary evidence exists for such a practice, his arguments are not convincing. The feeding of arena animals belongs to that sphere of 'utilitarian' activities in which Roman writers would be unlikely to show an interest. The single anecdote from the reign of Caligula indicating that carnivorous arena animals could be fed cattle was chosen by Suetonius, not for this particular piece of information, but because Caligula on one occasion is said to have used convicted criminals instead of cattle to feed the beasts.<sup>101</sup> It is dangerous to argue from this single piece of evidence that arena animals were fed only butchered cattle.<sup>102</sup> The meat of slaughtered arena beasts would have provided a useful dietary supplement to other animals that may well have been underfed to begin with.<sup>103</sup> Using such meat would also have reduced the amount of expensive meat that the officials in charge of feeding the animals would have to purchase. Although, as we shall see, Kyle argues forcefully that the meat of slaughtered arena animals was routinely distributed to the populace in Rome after a given *venatio*, left-over cuts of meat which were too mangled or sand-filled for human consumption could simply have been distributed amongst the surviving carnivores in the city's animal-enclosures.

Most of the meat from slaughtered arena animals, however, was evidently distributed to the local populace after a given *spectaculum*. Fresh meat would have been a welcome addition to the often inadequate diet of the urban populace attending

the shows, and the *editores* of such events could enhance their prestige even more by the provision of such a gift.<sup>104</sup> Although no pagan classical authors directly record such a practice, likely because it belonged to the sphere of 'mundane' activities they deemed uninteresting, it is alluded to by the Christian author Tertullian: *...illi qui de arena ferinis obsoniis coenant, qui de apro, qui de cervo petunt?...Ipsorum ursorum alvei appetuntur cruditantes adhuc de visceribus humanis.*<sup>105</sup> Tertullian's tone, however rhetorical, suggests that this consumption of 'arena meat' was not at all uncommon; the three animals specifically mentioned in the passage (boars, stags, and bears), were amongst those most frequently used in the *venationes*, and would consequently produce the largest number of carcasses to be disposed of afterwards.

#### *Gifts of Animals:*

On occasion, after the *spectacula* proper had ended, emperors would give a number of live animals to the Roman populace.<sup>106</sup> According to Suetonius, prizes given at one of Nero's games included various birds, cattle, and tame wild animals.<sup>107</sup> Dio records horses, beasts of burden, and cattle being offered as spectator prizes at the games staged by Titus to celebrate the opening of the Colosseum in 80.<sup>108</sup> Amongst the prizes distributed to the audience in the Colosseum during one of Domitian's Saturnalian *spectacula* were exotic birds such as flamingoes and guinea fowl.<sup>109</sup> "Lucky" audience members obtained wild arena animals at another show of Domitian's.<sup>110</sup>

Similar prizes are also attributed on more than one instance to the reign of Elagabalus by the *Historia Augusta*. Upon entering his consulship, Elagabalus is said to have given various animals to the populace: *...non...minuta animalia sed boves op[t]imos et camelos et asinos et cervos populo dirip*e*ndos abiecit.*<sup>111</sup> At another point the biographer remarks of Elagabalus that he was accustomed to distribute lots

for such prizes as ten bears, adding that ...*hunc morem sortis instituit quem nunc videmus*.<sup>112</sup>

Unfortunately, because of the terminology used to describe animal spectacles in the ancient sources, particularly in the SHA, it is sometimes difficult to determine if a given event actually involved the giving-away of animals or was a more conventional *venatio*. Particularly obscure terms are the noun *missio* and the verb *mittere*.<sup>113</sup>

One of the more memorable actions described in the life of Gallienus is the reward he gave to an inept *venator*, against whom...*taurum ingentem in harenam misisset*. In this context the verb *mittere* clearly refers to the sending of an animal into the arena to do battle with a human or other animal opponent.<sup>114</sup> The noun *missio* is similarly used in spectacle contexts, no doubt reflecting the fact that animals had to be *sent out* of their cages to face an opponent in the arena. The term as used in the SHA and other sources appears to indicate a general *venatio* in the arena, or a particular combat taking place within one of these events. For instance, an extant inscription from Palermo refers to a wide variety of animals enjoyed by the local populace in *varis missionibus*, which were most likely a number of animal combats staged in the arena by the local magistrate.<sup>115</sup>

The three relevant uses of the term *missio* in the SHA share a similar meaning. The life of Marcus Aurelius records a *spectaculum* in which *centum leones una missione simul exhiberet [et] sagittis interfectos*, while it is also said of his predecessor Antoninus Pius that *centum....leones una missione edidit*, perhaps a precedent for Marcus' *venatio*.<sup>116</sup> The lions sent into the arena by Antoninus Pius do seem to have been involved in combat rather than a mere display of wild animals, since the passage contrasts with the previous sentence in the biography that mentions the wide variety of animals which the emperor exhibited to the Roman populace during his reign (...*omnia ex toto orbe terrarum cum tigridibus exhibuit*). The final relevant usage of the term *missio* in the SHA comes from the life of Probus;

on one occasion...*edidit...in amphitheatro una missione centum iubatos leones, qui rugitibus suis tonitrus excitabant.*<sup>117</sup> The great noise made by these lions suggests that they were involved in combat rather than performing tricks or parading for the crowd.

In the same section of the life of Probus, however, another elaborate *spectaculum* is described in which *missi...per omnes aditus struthiones mille, mille cervi, mille apri; iam damae, ibices, oves ferae et cetera herbatica animalia, quanta vel ali potuerant vel inveniri. inmissi deinde populares, rapuit quisque quod voluit.* In this instance the terms *missi* and *inmissi* appear to be roughly synonymous: thousands of animals were brought into the Circus Maximus, which had been decorated to look like a forest, in order to be paraded before the audience. At least some of these spectators were evidently later allowed onto the circus floor to take whatever animals they wished. In no case, however, does any combat between the animals or humans appear to have been envisaged by Probus or the author of the *SHA*.<sup>118</sup>

A similar event is said by the *Historia Augusta* to have taken place some fifty years earlier. Gordian I, while serving as praetor under Septimius Severus, is said to have possessed a remarkable *silva*, in which were contained numerous herbivores including thirty wild horses, a hundred Cypriote bulls, and 150 wild boars. *Haec autem omnia [animals] populo rapienda concessit die muneris quod sextum edebat.*<sup>119</sup> According to a common interpretation of this passage, the *silva* in question was not an actual forest, but an arena floor equipped with various stage props to make it appear as such. Only the less dangerous animals in Gordian's collection were actually given to the populace, while the rest were slain, a practice which concurs with Philip the Arab's treatment of the animals at the Secular Games, which he ...*vel dedit vel occidit.*<sup>120</sup> Part of this interpretation, however, directly contradicts the *Historia Augusta*, which clearly states that Gordian gave up all his *silva* animals to the Roman populace. Although such species as wild boars could certainly be dangerous, those

who entered the *silva* were evidently prepared to take this risk in order to take advantage of such imperial munifence. As Merten comments, the distinguishing feature of these two *spectacula* was not the variety or number of animals, or even the attempt to simulate a natural environment, but rather the physical participation of the Roman populace in the event.<sup>121</sup>

In reality, the *silvae* described in the biographies of Gordian I and Probus may have merely been incidental: the actual event described in these accounts appears to have consisted of the distribution of various exotic animals to those members of the Roman populace lucky enough to obtain prize-tokens at the games. The distribution of such tokens for various items is of course a well-known feature of Roman *munera*, and was an easy way for the emperors to achieve the greatest amount of goodwill at little expense.

Although the specific information presented by the *Historia Augusta* cannot always be taken at face value, the independent evidence of Dio and Suetonius indicates that animals, as well as other prizes, were indeed sometimes given to the audience at imperial *spectacula*. In addition, despite the dubious value of Elagabalus' biography, it seems unlikely that the biographer would make such an easily-refutable claim that the distribution of lots for animals continued into the late empire if, in one form or another, this was not the case.<sup>122</sup>

The giving of animals as prizes, however, was certainly not without risk for spectators. Seneca comments in general upon the chaotic and dangerous scuffle provoked by the distribution of prizes to the audience in the arena.<sup>123</sup> Further chaos would occur on those occasions when members of the populace could climb into the arena to capture their animals themselves, rather than using tokens to obtain them after the show.<sup>124</sup>

In certain cases the gifts may even have saved the imperial treasury some money. The majority of the animals given away, such as horses, deer, and stags, were likely all housed and bred in various enclosures throughout Italy and elsewhere,

which meant that they did not have to be specially imported, at great expense, for such purposes. Bestowing various animals upon private citizens may have been one way for the emperor to remove surplus animals from such facilities when their numbers had grown too large to be maintained properly. In addition, once such animals were given away, the imperial treasury no longer had to pay for their upkeep. Financial considerations indeed may have induced some emperors, particularly in the later empire, to lavish such grants upon the populace. Aurelian is recorded as giving away two hundred tamed Libyan and Palestinian animals of various types to the populace so that he would not have to pay for their upkeep (...ne [this group of animals] *fiscum annonis gravaret*).<sup>125</sup>

*Performer Titles and Status:*

The specially-trained hunters in the arena were referred to by one of several names. Usually called *venatores*, they could also be called *bestiarii*. Although at least one scholar contends that the term *bestiarius* was used only to denote criminals condemned to be killed in the arena by wild animals, this name was also used to denote the trained hunters of these animals in the *venationes*.<sup>126</sup> For instance, the *ludus bestiavorum* mentioned by Seneca was surely for those who made a living fighting wild animals in the arena: those condemned to die there were not likely to have received special training beforehand.<sup>127</sup> In addition, a Roman tombstone found in Gaul was dedicated to Ruffius Ruffianus, *pereruditus bestiarius*.<sup>128</sup> It is highly unlikely that one would commemorate a criminal condemned *ad bestias* in such a fashion, particularly with a highly complimentary epithet like *pereruditus*, although it must be admitted that the term as applied to a combatant in the arena also appears unusual. Finally, there also exists at least one instance in the later empire of beast-fighters being called *arenarii*.<sup>129</sup>

A variety of terms also existed for *venatores* in the Greek east. Amongst the names used in the inscriptions collected by Robert are θηριομάχοι, κυνηγοί, ἀρχικυνηγοί, and θηρήτορες ἄνδρες. In many cases, however, such as when the term φιλοκύνηγος or συνκύνηγος is applied to a person, it is difficult to decide if the individual was a participant in arena spectacles, a fan of such spectacles, or a hunter in the wild.<sup>130</sup> Two inscriptions from Phillipi record the dedication of statues of Nemesis, Victory, and Ares at the local theatre by Marcus Velleius Zosimus, the priest of Invincible Nemesis, on behalf of the στέμμα φιλοκυνήγων.<sup>131</sup> Two interpretations are possible for this group (στέμμα): either it represents an association of arena *venatores*, similar to the *familia gladiatoria* attested elsewhere in another inscription, or it represents a clique of fans devoted to the *venationes*, such as are known to have existed for particular *familiae* of gladiators.<sup>132</sup>

Other epigraphic evidence indicates that the *venatores*, like their gladiatorial counterparts, could indeed be organized into local *collegia*. An inscription from Gallia Narbonensis records a *collegium venatorum Deensium qui ministerio arenario fungunt*, while another inscription found in Mutina records a *collegium harenariorum Romae*.<sup>133</sup> It has been suggested, however, that the second inscription refers to a *collegium* of *fossores arenae* rather than *venatores* proper, despite the fact that the term *arenarius* could be used to denote beast-hunters.<sup>134</sup>

Beast-hunters could, at least on occasion, perform a variety of functions within the arena. A funerary epitaph from Nicaea indicates that the same individual could fight both as a gladiator and *venator*. The inscription records the death of the *retiarius* Χρυσόμασχος(?), who was evidently a *venator* before he joined the gladiatorial ranks: Χρυσόμα(σ)λλον ῥητιάριον τὸν πρὶν δὲ κυ(ν)η(γ)όν.<sup>135</sup> As Robert states, a switch between these two forms of combat specialization would have been quite plausible; practitioners of both styles were comparatively lightly-armed fighters who relied on their speed and mobility to evade both human and animal opponents.<sup>136</sup> This inscription, however, likely does not reflect a hierarchy in the



arena where *venatores* were occasionally promoted to the more prestigious gladiatorial ranks. Both gladiators and *venatores*, as we shall see, appear to have enjoyed the same approximate social status in antiquity: an arena combatant could just as easily switch from *retiarius* to *venator* as vice versa.

Some *venatores* appear to have been specialist fighters, but to judge from the epigraphic and pictorial evidence, the variety of such combatants was not nearly so great as that amongst the gladiators. A number of inscriptions record ancient bull-fighters, such as an epitaph from Mactaris in North Africa commemorating the unfortunate Sabinus, who evidently fought one bull too many.<sup>137</sup> A similar inscription from Romania records the death of the κυνηγός Attalus at the hands of a βοῦς ἄγριος, possibly a bison.<sup>138</sup> The *taurarii* and *taurocentae* recorded for a Pompeiian spectacle would also appear to be such specialists, although as will be discussed, the latter may not actually have fought bulls in the arena.<sup>139</sup>

Bear specialists also evidently participated in the *venationes*, apart from the *ursarii* on the frontiers who captured the bears for the games. An inscription from Gaul (see further on page 41), describes an individual who evidently fought in the arena as *comes ursaris*.<sup>140</sup> Another inscription from Amasia commemorates a certain Troilus, who died of fever after ἐν σταδίοις πάσας ἄρκους ὑποτάξας.<sup>141</sup> Robert infers from this inscription that Troilus actually fought bears in the arena, but the relief associated with the inscription, which depicts a man teasing a small bear with a stick, suggests that Troilus may have trained bears to perform tricks rather than slaughter them.<sup>142</sup>

Some slight evidence exists to suggest that the *venatores* may have also functioned as trainers for the wild animals imported to fight in the arena. Seneca records seeing a lion in the amphitheatre who defended a *bestiarius* it recognized as its former trainer.<sup>143</sup> If one assumes that the *bestiarius* in this case was not a condemned criminal, the passage indicates that this individual had either been 'promoted' from animal-trainer to combatant, or performed both tasks

simultaneously. The latter alternative is perhaps more likely: training animals on their days away from the arena would provide useful combat training for the *venatores* themselves.

Like gladiators, *venatores* could also evidently achieve individual fame in the arena: an inscription from Pompeii advertises a certain Felix fighting bears in an upcoming *venatio*.<sup>144</sup> Several curse tablets found in Carthage's amphitheatre refer specifically to individual *venatores* and the animosity they could provoke in fans of the arena. A late second or early third century tablet directed at the *venator* Gallicus prays that he might be rendered helpless against the bears and bulls in the amphitheatre. A second tablet wishes destruction on the *venator* Maurussus from the bears, bulls, boars, and lions he fights against.<sup>145</sup> Several of Martial's epigrams celebrate the exploits of the *venator* Carpophorus at the dedication of the Colosseum, while as late as the sixth century, two poems written by Luxorius commemorate the black *venator* Olympius in Carthage.<sup>146</sup> The hunters depicted in the mid-third century Magerius mosaic from Tunisia have their names included in the scene as a mark of their popularity: Spittara, Bullarius, Hilarinus, and Mamertinus.<sup>147</sup>

Mosaic evidence indicates that various animals could, like the *venatores* who fought them, achieve a certain fame among spectators. A mosaic found in Radez, Tunisia depicts, amongst other animals, a series of bears given names like Nilus, Simplicius, Fedra, Alecsandria, Itus, Gloriosus, and Braciatus.<sup>148</sup> The Magerius mosaic shows four named leopards: Victor, Crispinus, Luxurius, and Romanus. A leopard hunting scene from one of the mosaics of the 'Hunting Baths' in Lepcis Magna also features some 'celebrity' leopards; in this case Rapidus, Fulgentius, and Gabatius(?).<sup>149</sup> The fact that all of these named animals stem from North African mosaics is yet another indication of the popularity of the *venationes* amongst the people of that region.<sup>150</sup>

Although it is possible that the animal names in these mosaics were merely inventions of the artists, it seems more likely that these were the actual names of the

animals involved in the various *venationes* commemorated by them. Even if these particular names were invented by the mosaicists involved, the artists would have been unlikely to do so unless it was common practice for such animals in the arenas to be named. As Toynbee states, "...bears [and leopards etc.], like racehorses, may have been 'star' performers who made reputations for themselves in successive appearances and were known to the public by name".<sup>151</sup>

Popular animals like Simplicius the bear may have normally been pitted against less dangerous animals such as wild asses in the arena so that an *editor* could display to an eager public the fighting prowess of a 'star attraction' without unduly endangering it. In the Magerius mosaic, however, the named leopards are actually slain by the *venatores*, another indication of Magerius' generosity as emphasized by the mosaic. Presumably an *editor* had to pay a high fee for such animals to participate in his *munus*, and an even higher fee if they were to be killed in the upcoming show.

Despite the fact that *venatores* and their adversaries could be quite popular among fans of the arena, beast-hunters, like gladiators, enjoyed a somewhat ambiguous social status overall in antiquity. In the Augustan period, at least, fighting animals in the arena was evidently not considered disgraceful: Suetonius records that amongst the arena *venatores* of that era were young volunteers from noble families in Rome. Aymard suggests that such an activity may have been seen by Augustus as a fitting way to inculcate the noble youth of Rome with the *virtus* necessary for high administrative or military posts.<sup>152</sup>

'High-status' individuals fighting animals in the arena, however, like those fighting as gladiators, do appear to have been frowned upon later in the century, although it is not clear how many ever participated in *venationes* after the death of Augustus. Suetonius records that at one of Claudius' *spectacula*, mounted members of the Praetorian Guard, as well the praetorian prefect himself, participated in a *venatio* involving unspecified African animals (lions?), but they may well have been

compelled to do so by the emperor.<sup>153</sup> A similar situation may have existed under Nero, when members of his Praetorian Guard are said to have killed 400 bears and 300 lions at a single *spectaculum*.<sup>154</sup>

A relevant anecdote of Dio concerns the consul of 91 AD, Acilius Glabrio, who was one of Domitian's many victims. The historian records that Domitian forced Glabrio to fight a lion at his Alban estate, while Juvenal adds that the latter also fought bears at the same venue: *...cominus ursos figebat Numidas, Albana nudus arena venator*.<sup>155</sup> Unfortunately it is unclear how many times Glabrio fought in such combats, or whether he fought only under compulsion from the emperor: the apparent ease with which he slew the lion set against him suggests in any case that he was an experienced animal-fighter. It is even possible that Domitian had Glabrio give a private exhibition of his skills at the Alban estate because of previous reports that the emperor, a hunting enthusiast himself, had heard about Glabrio's skill. In any event, the jealous Domitian is said to have had Glabrio executed because of his combats with wild animals.<sup>156</sup> Even if this charge was merely used as a pretext by Domitian, the mere fact that it was chosen by the emperor suggests that the fighting of animals by members of the nobility in the late first century was not so acceptable as it had been under Augustus.

An exchange of letters between Fronto and the young Marcus Aurelius between 145 and 147 may also refer to the Glabrio episode. Fronto, asked to supply a legal theme on which Marcus could practice his oratorical talents, suggests the offence of a Roman consul, wearing only a coat of mail, slaying a lion in public during the feast of Minerva.<sup>157</sup> Marcus in turn asks if the supposed event occurred in Rome, or during Domitian's reign at his Alban estate, which suggests that the only such incident the former could bring to mind was Glabrio's 'exhibition' in the late first century. In addition Marcus actually complains that Fronto's theme seems improbable: Ἀπίθανος ὑπόθεσις *videtur mihi*...<sup>158</sup> This suggests that Glabrio's escapade may have been the only instance of a high-status *venator* in Rome since the

aristocratic *venatores* recorded during Augustus' reign by Suetonius, and in turn reinforces the idea that such combatants were definitely disapproved of by Marcus' time, if in fact they had indeed been acceptable under Augustus.

A similar situation, in terms of the changing 'social acceptability' of *venatores*, evidently developed elsewhere in the empire: an Augustan inscription from Mylasa records a dedication to the high-priest of the imperial cult by eighteen κυνηγοί who were free citizens.<sup>159</sup> A later funerary epitaph from Philippi in Macedonia also records a *venator* of privileged origin: εὐσήμεν δὲ γένους καὶ εὐδόξου. As Robert notes, however, the individual commemorated by the epitaph emphasizes that he took up this profession of his own free will (Ἠράσθη δὲ ἑτέρων τις ἀνὴρ καὶ γὰρ πάνυ τούτου), and not under any compulsion, as a passerby might initially assume.<sup>160</sup> Finally, in the third century, the African writer Cyprian openly attacked those who volunteered to fight in the arena as *bestiarii*.<sup>161</sup>

Many laws discriminatory against gladiators, although they do not specifically mention *venatores*, in all likelihood applied to the latter group as well. Such laws included those barring gladiators from serving on juries or municipal councils. A sixth century law from the *Digest*, which probably originally applied to gladiators as well, barred freedmen *bestiarii* with two children from the exemptions normally granted to ordinary freedmen under such circumstances.<sup>162</sup>

On the other hand, beast-hunters, like gladiators, could also be specially rewarded for fighting well in the arena: the *Digest* records prizes of *lances* and *disci* given to proficient *bestiarii*.<sup>163</sup> Such individuals could also, at least on occasion, find profitable employment after their retirement from the games. An inscription from Cos records *venatores* and gladiators who served as bodyguards for an Asiarch's wife.<sup>164</sup> In the late Republic, prominent demagogues such as Milo are said to have employed both gladiators and *bestiarii* in a similar capacity: such individuals were also presumably no longer on 'active duty' in the arena.<sup>165</sup>

Performers employed as 'acrobats' in the animal *spectacula* of the later empire, however, possessed an even lower status than the earlier *venatores*, and were not even amply rewarded for the risks they undertook in the arena. Evidence taken from such varied sources as the *Historia Augusta* and the letters of Theodoric suggests that in the late empire a much higher premium was placed on the lives of the animals than on the acrobats in a given *spectaculum*, another apparent indication of the worsening supply of wild animals for the games at that time.<sup>166</sup> In the late fourth century Prudentius wrote disapprovingly of contemporary *spectacula*, where *...sanguinis humani spectacula publicus edit consensus legesque iubent venale parari supplicium, quo membra hominis discerpta cruentis morsibus oblectent hilarem de funere plebem*.<sup>167</sup> No mention is made of potential animal fatalities at such events.

This view of the one-sided nature of late imperial animal *spectacula* is echoed by the letter of Theodoric to Maximus, which indicates that the only real suspense involved in these events was whether or not the so-called *venatores* would be killed by the animals in the arena, and not vice versa:

...what gift should be spent on the huntsman who strives by his death to please the spectators? ...trapped by an unhappy destiny, he hastens to please a people who hope that he will not escape. A hateful performance, a wretched struggle, to fight with wild beasts which he knows that he will find the stronger. His only confidence lies in his tricks, his one hope in deception.<sup>168</sup>

Prudentius and Theodoric's view of the 'disadvantaged' human performers at the *spectacula* appear to be borne out by the near-contemporary diptych of Areobindus. Of all the persons depicted with various animals in the arena, only one, the central figure on the reverse of the diptych, appears to be armed, with nothing more than a lasso.<sup>169</sup> Presumably this could only be used at most to restrain an animal, rather than kill or even injure it. Even if the sole purpose of the lasso-wielding performers depicted on this and other pieces of late Roman art was to protect other arena performers from harm, it is questionable, contra Jennison, how effective they were in this regard.<sup>170</sup>

Keller has suggested that the acrobats depicted on such pieces of art as the Areobindus diptych were criminals condemned to be killed by the animals, based upon their lack of defensive or offensive weaponry.<sup>171</sup> Although criminals condemned *ad bestias* certainly were hampered with a similar lack of equipment, Theodoric's letter to Maximus nevertheless appears to nullify Keller's argument that the individuals depicted on the diptych of Areobindus were merely criminals using equipment such as the *cochlea* to prolong their lives a little longer. The whole point of this letter was to persuade Maximus to pay the various animal-acrobats for their performances, just as organ players or wrestlers were paid. As Theodoric states, "...there is the guilt of manslaughter in being tight-fisted to those whom your games have lured into death..."; such a concern for financial compensation would not have been shown towards condemned criminals.<sup>172</sup> The letter suggests not only that at least some of the human participants in such *spectacula* normally perished, but also that provided they performed well enough, they had a chance to live and perform another day. Presumably, however, officials like Maximus did not have too worry about paying pensions to those who reached retirement age!

#### *Equipment and Accessories:*

The most common weapon employed by *venatores* in the arena was a spear.<sup>173</sup> Several of the depictions of *venatores* in relief sculpture or other artistic media show them using spears in combat with such creatures as lions, bulls, and bears.<sup>174</sup> Often transverse bars were set behind the spear-heads to prevent the weapons from becoming stuck in the animals they were employed against.<sup>175</sup>

Beast-hunters, however, were by no means limited in their choice of weapons. Two reliefs found in Ephesus and Smyrna, showing *venatores* fighting respectively a lion and a bull, depict the hunters armed with clubs, while the *venatores* in a

number of other such scenes fight with daggers, as in the case of the individual fighting a bull in the Apri relief.<sup>176</sup> The second or third century Kibyra relief shows a beast-hunter employing a trident as well as a dagger against a bear.<sup>177</sup> There may well have been various weapon specialists participating in the *venationes* as well as in the gladiatorial combats: the use of different weapons against the animals, such as tridents and daggers, and the different fighting techniques their use entailed, would have undoubtedly been more interesting to spectators than seeing animals speared *ad nauseam*.

On occasion, performers armed only with boxing-straps (*caestus*), such as those used by pancratiasts, would fight against bears in the arena. Reliefs from both Apri and Sofia depict such combats. Although these 'boxing-matches' might seem to have heavily favoured the bears involved, this was not always the case: Pliny states that bears were often killed by a blow to the head (...*saepe in harena colapho infracto* [bears] *exanimantur*...). Presumably lead strips were placed under the straps used by the human performers, which would make them far more effective in both attacking the bear and defending themselves against its claws.<sup>178</sup>

Occasionally beast-hunters or their assistants would employ other devices to rouse their opponents into an appropriate fighting mood or to subdue them. Animals such as the reluctant rhinoceros at Titus' spectacle in AD 80 sometimes had to be encouraged to perform.<sup>179</sup> A number of reliefs found in the Greek east show *venatores* or animal trainers using what appear to be coloured handkerchiefs or towels to anger such animals as wild cats.<sup>180</sup> According to Ovid a red cloak (*poenicea vestis*) was used in the theatre to rouse bulls to a fighting fury, much as in modern-day bullfighting.<sup>181</sup> Pliny records that one type of animal *spectaculum* involved the *venator* or trainer throwing a similar cloak over a lion's head in order to subdue it, a trick evidently learned from a Gaetulian shepherd.<sup>182</sup>

On other occasions whips were used to goad the arena animals. Three of the four reliefs collected by Robert to illustrate the use of 'handkerchiefs' in the arena



also depict individuals using whips against bears and wild felines. In the case of the Apri relief the same beast-hunter is shown wielding a 'handkerchief' in one hand and a whip in the other against an onrushing bear (Fig. 19).<sup>183</sup> Evidently his efforts to provoke the animal into a fighting fury were successful. Volbach speculates that the Areobindus diptych of 506 depicts another such *excitator bestiarum* (Fig. 21).<sup>184</sup> On the half of the diptych depicting a lion *venatio*, the gesticulating and unarmed figure standing behind the four men in combat with lions appears to be such an individual. On the other half of the diptych, the man with upraised arm standing behind a bear charging out of a gate is probably performing a similar function.

Although there is evidence that *venatores* could wear armour like the gladiators, they normally appear to have relied on the greater mobility afforded by the lack of heavy equipment to avoid injury.<sup>185</sup> Undoubtedly many of the larger animals they faced, such as bears and lions, would have made short work of such protection anyway. Instead the *venatores* generally appear to have worn either a leather tunic or a covering of leather bands over their lower abdomens, which afforded some protection for the hunters, while not hindering their much-needed mobility. Both types of garments are depicted in the *venatio* scene from the relief found in Apri. Although one of the *venatores* on the Apri relief is shown wearing a long-sleeved tunic under his girdle of leather bands, such bands were worn more often than not without any additional clothing underneath, as in one of the reliefs associated with a *venator* epitaph found in Phillipi.<sup>186</sup>

Occasionally other 'accessories' were also used by *venatores* in the arena. The *venator* from Phillipi, depicted in combat with a lion, wears a protective covering over his left shoulder. The hunter in this scene also wears high boots, as do his counterparts in combat with bears and bulls on relief scenes from Apri and Hierapolis. The latter relief, as well as one found in Smyrna showing a combat with a bull, also depict *venatores* wearing protective bands on their legs.<sup>187</sup> Since bulls, bears, and lions were amongst the most dangerous animals a *venator* could face in

the arena, it makes sense that he might want to use a little extra protection in cases where he knew he was going to fight such creatures.

Although beast-hunters normally fought bare-headed, on occasion, like *secutores*, they could also wear helmets or some sort of head protection in the arena. In the Apri relief two *venatores*, in combat with a bear(?) and bull wear such covering: the one fighting the bear wears what appears to be some sort of floppy hat, while the other being batted into the air by the bull wears a more 'conventional' conical hat or helmet.<sup>188</sup> In a few cases such individuals also employed shields in their contests, such as the *venatores* in combat with bulls on the Kibyra and Smyrna reliefs, and their counterpart fighting a bear on the relief from Apri.<sup>189</sup> A terracotta relief from Rome depicts a *venator* in combat with a lion, using both a helmet and long shield.<sup>190</sup>

Occasionally the *venatores* would even employ other animals against their opponents in the arena. The specialized bull event known as the ταυροκαθάπτῆς, as we shall see, required the participation of mounted athletes. The Kos arena mosaic also depicts the mounted hunter Rufinus amidst various wild animals.<sup>191</sup> Other evidence suggests that beast-hunters in the arena were sometimes aided by dogs. Numerous pieces of art from the western empire do show these animals in an arena context, such as a now-destroyed relief from the tomb of N. Festius Ampliatus(?) in Pompeii (Fig. 22).<sup>192</sup> One of Martial's epigrams records the death of the hunting-dog Lydia, which was raised by the masters of the amphitheatre (*amphitheatrales inter nutrita magistros*). This may indicate that Lydia was involved in hunts within the amphitheatre as well as in the wild: unfortunately the poem does not specify whether or not the boar that killed the dog was an arena combatant.<sup>193</sup>

Various pieces of pictorial evidence also indicate that *venatores* periodically rode bulls in combat with other animals. Numerous arena representations feature beast-hunters mounted on bulls, sometimes employing straps, and at other times reins, to control their mounts. On the Cos *venatio* mosaic such a pair is depicted

attacking a wild boar, while a bear is the victim in the reliefs found in Hierapolis, Kibyra, and Smyrna. The Apri relief shows a *venator*/bull tandem batting an unfortunate man into the air.<sup>194</sup> It is unclear whether this scene represents a beast-hunter losing control of the bull and accidentally striking one of his colleagues, or the execution of a criminal condemned *ad bestias*.

A device *venatores* or acrobats could occasionally fall back upon in the arena was the *cochlea* or ἐλῆξ, evidently so named because of its revolving motion similar to that of a screw. This apparatus consisted of two or more wooden panels fixed to a revolving wooden pole set in the arena floor. A *venator* hiding behind one of these panels could rotate the pole, keeping the panel between himself and his opponent, thereby confusing the animal and allowing the man to escape. This structure is described at a relatively early date by Varro: *...ostium habere humile et angustum et potissimum eius generis, quod cocliā appellant, ut solet esse in cavea, in qua tauri pugnare solent*.<sup>195</sup> The passage indicates that even in the early empire this device was commonly used for *spectacula*. There is no reason to assume that the *cochlea* could not also have been used for events involving animals other than bulls in the early empire as well, although such a use was not specifically recorded by Varro.

Various depictions of this device survive, such as those found on two consular diptychs from the later empire and a relief from Sofia. In a second scene from the Areobindus diptych, another man, also being bitten on the ankle by a second bear, is in the midst of attempting to run behind what appears to be a *cochlea*. Evidently certain combatants specialized in the use of the *cochlea*: one of the *venatores* shown on the previously mentioned Cos mosaic is named Κοχλᾶς, an epithet derived from the name of this device.<sup>196</sup>

The same apparatus is alluded to in the letter from Theoderic to the consul Maximus. In describing the events of a typical beast-hunt, Theodoric mentions one of the participants taking shelter from the onrushing bears:

...one man trusts in angled screens, fitted in a rotating four-part apparatus. He escapes by not retreating; he retreats by keeping close; he pursues his pursuer, bringing himself close up with his knees, to escape the mouths of the bears. Draped on his stomach over a slender spar, a second[?] lures on the deadly beast, and can find no way of surviving without peril.<sup>197</sup>

The exact nature of the spar (*regula*) referred to in the second clause is unclear, but it does appear to belong to the four-screened *cochlea*: if another performer were being alluded to in this passage, the phrase (...*ille in tenuem regulam uentre suspensus inuitat exitiabilem feram...*) in all probability would begin with *alter* rather than *ille*.<sup>198</sup> The individual in question may have clung on top of the spinning *cochlea*, just out of reach of the enraged bears beneath. This would explain the performer drawing his knees up to his chest to avoid the bears' jaws, as well as having his stomach draped over the *regula*, which in this instance might be one of the cross-bars at the top of the *cochlea* screens. Presumably the reference at the very end of the passage to escape only being obtained through danger alludes to the bears keeping the *cochlea* in motion by swatting at the man above and hitting its screens instead: if the *cochlea* were to come to a complete stop, it would make the performer much more vulnerable.

The same letter also suggests that *cochleae* were used with lions as well as bears in the later empire. Another performer is described as hiding behind three gates (*tribus...ostiolis*), sometimes showing his back, and sometimes his face, to the attacking lions. Apparently the apparatus in question was a *cochlea* similar to that used with the bears, except with only three instead of four rotating screens.<sup>199</sup>

Another device used by acrobats in particular, which provided somewhat more safety to the performer using it than the *cochlea*, was the *canistrum*. This implement consisted of a hollow tub perforated with holes. Using the holes in the tub, the performer could poke at and enrage an animal such as a bear while ducking down within the comparative safety of the vessel. The *canistrum* could safely be batted and rolled around the arena, much like the clown barrels used in modern rodeos, provided that the performer was able to keep from falling out of it.<sup>200</sup> Although

Jennison suggests that the worst injury a performer using a *canistrum* could suffer was the loss of a limb, in reality a number must have perished at the claws of the animals they were antagonizing. Such an implement is depicted on a carved marble tablet from Narbonne, dating to the first century: in the foreground of the scene, a performer's head and shoulders stick out of just such a tub, while an enraged bear grasps at its rim (Fig. 23).<sup>201</sup>

Other late antique diptychs show similar devices used in spectacles involving bears. A scene from one of the early sixth-century Areobindus diptychs shows a bear attacking a large round container, possibly hinged in the middle, which appears to be formed of iron or wooden bars.<sup>202</sup> Inside the container can be seen what appears to be the head of a man. Evidently performers climbed into such contraptions and teased the animals they were pitted against from within: the beasts would then bat the sphere around the arena.<sup>203</sup>

Another diptych of Areobindus depicts an even more unusual apparatus used for animal-spectacles. In the centre of the arena scene, two individuals are shown standing in elevated enclosed platforms resembling crows-nests.<sup>204</sup> The base of each of these platforms is attached by a post to a long pole standing between them. Animals such as the enraged bear depicted in the diptych were evidently intended to rotate this apparatus by swatting at one of these poles, while the performers teased them from the crows-nests above. The diptych of Anastasius, manufactured in 517, shows another variation of this device.<sup>205</sup> In this case, the central pole does not appear to rotate, but the crows-nests can be raised and lowered by means of pulleys attached to the top of the pole. The ropes running through the pulleys are held by the performers in the crows-nests, who can thereby control the latter's movement.<sup>206</sup>

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Notes:

<sup>1</sup> Robert (1971) 144-45, n. 104 (Pinara); 145, n. 105 (Xanthos).

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- <sup>2</sup> Cicero, *De Oratore*, 2, 78, 317; 80, 325: Ovid, *Ibis*, 47-48: Ville (1981) 408.
- <sup>3</sup> Symmachus, *Epistulae*, 2, 77.
- <sup>4</sup> Ammianus Marcellinus 14, 11, 3; 16, 5, 10; 28, 1, 10.
- <sup>5</sup> Wunsch (1900): 259-65: Robert (1971) 310, n. 4.
- <sup>6</sup> Wunsch (1900) 263.
- <sup>7</sup> Kockel (1983) 75-85: pl. 20.
- <sup>8</sup> Dunbabin (1999) 119-21.
- <sup>9</sup> In the later western empire, combats involving a wide variety of animals were sometimes called *pancarpa*: see Merten (1991) 159-60.
- <sup>10</sup> IGR 3, 500: Robert (1971) 149, n. 113a; 310-11.
- <sup>11</sup> Wiedemann (1995a) 18.
- <sup>12</sup> Wiedemann (1995a) 24-25. It should be pointed out that some of these hunting-scenes are more 'generic' in nature, and do not necessarily indicate an inordinate enthusiasm for the *venationes* on the part of the patrons commissioning the mosaics. It has even been suggested that such depictions may also have held a certain 'protective magic' for many Romans: the courage and virtue of the *venatores* shown in these scenes would act as a defence against evil in the houses in which they were displayed: see Monteagudo (1991) 260: Anderson (1985) 135.
- <sup>13</sup> In the case of Pompeii, the fact that inscriptions advertising upcoming spectacles generally only mention a *venatio* at or near the end of the text, without any details, suggests that the average beast-hunt staged in the city was not overly impressive: see Sabbatini Tumolesi (1980) 140-41.
- <sup>14</sup> cf. Fora (1996b) 45. The *venationes passivae*, mentioned in two inscriptions from Italy [Naples and Puteoli] were evidently larger than usual events, involving a relatively wide variety of animals: see ILS 5054; 5186: Fora (1996b) 45-46. Since Puteoli, as discussed above, was one of the main landing-ports for exotic animals in Italy, it is perhaps not surprising that *editores* in that city could organize such a spectacle.
- <sup>15</sup> Wiedemann (1995a) 15-16: Bomgardner (1992) 163: Dunbabin (1978) 66. As Bomgardner [(1984) 88] notes, ten of the curse tablets discovered in Carthage name *venatores*, as opposed to only two naming gladiators, which suggests that beast-hunts in North Africa were both more frequent and more popular than gladiatorial combat.
- <sup>16</sup> Dunbabin (1978) 66.
- <sup>17</sup> Dunbabin (1978) 66-67.
- <sup>18</sup> Dunbabin (1978) 69.
- <sup>19</sup> Blázquez (1962) 54-55.
- <sup>20</sup> Dunbabin (1978) 72.
- <sup>21</sup> Dunbabin (1978) 74.
- <sup>22</sup> Toynbee (1996) 30-31: Dunbabin (1978) 71-72.
- <sup>23</sup> Pliny, *NH*, 9, 4-5.
- <sup>24</sup> Sabbatini Tumolesi (1980) 87.
- <sup>25</sup> Wiedemann (1995a) 86. As Sabbatini Tumolesi [(1980) 87], however, points out, on occasion condemned criminals could be forced to dance in *pyrrichae* ending with their own destruction.
- <sup>26</sup> Statius, *Silvae*, 2, 5: Jennison (1937) 177-79.
- <sup>27</sup> Martial, *Epigrams*, 13, 98; 100: Ville (1981) 427.
- <sup>28</sup> Dunbabin (1978) 70-71.
- <sup>29</sup> Plutarch, *De Sollertia Animalium*, 5, 100: Jennison (1937) 62-63.
- <sup>30</sup> Suetonius, *Nero*, 11, 2. Seneca [*Epistulae Morales*, 85, 41] confirms the presence of individuals necessary for taming and training animals in Rome at this time: *...certi sunt domitores ferarum qui saevissima animalia....hominem pati subigunt...* Of course some sort of rudimentary training was required for any animal to be able to fight in the noise and confusion of the arena; cf. Jennison (1937) 86.
- <sup>31</sup> Martial, *Epigrams*, 1, 104.

- <sup>32</sup> cf. Jennison (1937) 63.
- <sup>33</sup> Plutarch, *Bruta Animalia Ratione Uti*, 992A-B.
- <sup>34</sup> Libanius, *Orationes*, 33, 21.
- <sup>35</sup> Libanius, *Orationes*, 46, 14: Liebeschuetz [(1972) 111], thinks that such entertainers performed for the troops stationed in Antioch.
- <sup>36</sup> Merten (1991) 174.
- <sup>37</sup> Goetz (1965) Vol. 3; 240: Robert (1971) 326.
- <sup>38</sup> *Anthologia Graeca*, 9, 533: Robert (1971) 326-27.
- <sup>39</sup> Cassiodorus, *Variae*, 5, 42, 6: Barnish (1992) 92. Theodoric uses the term *venatio* to refer to the spectacle in question, even though animal slaughter does not appear to have been part of the event: as in this instance, it was not uncommon for ancient authors to denote all spectacles involving animals, whether violent or not, under the term *venatio*.
- <sup>40</sup> Prudentius, *Hamartigenia*, 369-70.
- <sup>41</sup> Robert (1971) 117, n. 60: 326: Capps Jr. (1949) 69-70.
- <sup>42</sup> Merten (1991) 172, n. 121: Volbach (1976) 33-34, n. 11.
- <sup>43</sup> Lehmann (1990) 143, 160: Volbach (1976) 35-36, n. 17. A similar scene of a performer vaulting over a bull was apparently depicted on one of the Kibyra reliefs, although this assertion cannot now be verified: see Kalinka (1926) 323; Robert (1950) 59.
- <sup>44</sup> Keller (1913) Vol. 1; 33: Saglio (1962) 1485.
- <sup>45</sup> Robert (1971) 90-92, n. 27: 326.
- <sup>46</sup> Robert (1950) 57-60.
- <sup>47</sup> Robert (1950) 71-72, n. 340.
- <sup>48</sup> Goetz (1965) Vol. 3; 240.
- <sup>49</sup> *SHA*, *Probus*, 19: Robert (1971) 327-28.
- <sup>50</sup> Robert (1971) 327-28.
- <sup>51</sup> Robert (1971) 152-53, n. 121: 159, n. 132: 328.
- <sup>52</sup> *SHA*, *Carus*, 19, 2.
- <sup>53</sup> Apuleius, *Metamorphoses*, 15, 1-3: Merten (1991) 166-67.
- <sup>54</sup> Merten (1991) 165-66, n. 91.
- <sup>55</sup> Varro, *De Re Rustica*, 3, 13, 2.
- <sup>56</sup> Pliny, *NH*, 8, 2: Plutarch, *De Sollertia Animalium*, 973E-974A.
- <sup>57</sup> Merten (1991) 167: Lehmann (1990) 169-70.
- <sup>58</sup> Martial, *Epigrams*, 1, 104: Apuleius, *Metamorphoses*, 11, 8.
- <sup>59</sup> Merten (1991) 169.
- <sup>60</sup> Toynbee (1996) 96-97: Merten (1991) 174. Similar uncertainty exists concerning the structure depicted in the background of one of the Kibyra reliefs, consisting of two horizontal rows of panels set against vertical bars or posts. Kalinka maintains that this structure is a large animal-cage, while Robert suggests that it may be some sort of climbing apparatus used by the *toechobates* to elude bears: see Robert (1950) 56-57. Some scholars have theorized that the inspiration for this particular type of spectacle came from the well-known story of the thief Eurybatos, which appears to date back to Aristotle: later sources such as the *Suda*, as well as Aristainetos, indicate that the story was still current in the fifth century AD. According to this tale, Eurybatos, when finally captured, was asked by his guards to display his climbing skills one more time for them. Thereupon he took his climbing tools, including such implements as iron spikes, climbed up and over the prison wall and escaped:...ἀνερχῆτο πρὸς τὸν τοῖχον. Because of the similarity between the terminology used to describe Eurybatos' escape, and that used by the *Historia Augusta* to describe the *toechobates* (...*qui per parietem...cucurrit*), scholars such as Blümner have speculated that the latter performer probably also used climbing tools in the arena to escape the animals set against him. The performer on the Areobindus diptych,

commonly thought to be a *toechobates*, carries no such equipment, however, a fact that calls into question the supposed derivation of such an event from the story of Eurybatos: see Suda, "*Eurybatos*", p. 645: Merten (1991) 176-77.

<sup>61</sup> Pliny, *NH*, 8, 40: Ammianus Marcellinus 22, 15, 24.

<sup>62</sup> Dio 55, 10, 8: Strabo 17, 1, 44: Toynbee (1996) 219.

<sup>63</sup> Calpurnius Siculus, *Eclogues*, 7, 65-8: Traversari (1960) 111.

<sup>64</sup> Suetonius, *Nero*, 12, 1: Dio 61, 9, 5: Coleman (1993) 56-57: Traversari (1960) 112.

Assuming that Nero's spectacle took place in his wooden amphitheatre, it may in fact have been staged in connection with this building's dedication.

<sup>65</sup> Tacitus, *Annals*, 15, 37, 2-7: Coleman (1993) 50-51.

<sup>66</sup> Pliny, *NH*, 9, 15, 41.

<sup>67</sup> Martial, *De Spectaculis*, 28: Suetonius, *Titus*, 7, 3: Dio 46, 25, 3: Traversari (1960) 112-13: Coleman (1993) 65-66, 69. As Coleman notes, this particular spectacle was likely a *venatio* in which the majority of animals were slaughtered, rather than a simple display, since it would have been difficult to 'fish' so many animals out of the *stagnum* had they survived the show.

<sup>68</sup> Dio 66, 25, 2: Coleman (1993) 65: Traversari (1960) 113-14.

<sup>69</sup> *SHA*, *Antoninus Pius*, 10, 9: Traversari (1960) 115.

<sup>70</sup> Dio 73, 10, 3; 19, 1: Traversari (1960) 116.

<sup>71</sup> *SHA*, *Elagabalus*, 28, 3; *Gordiani Tres*, 33, 1: Traversari (1960) 116-17.

<sup>72</sup> *SHA*, *Firmus*, 6, 2: Traversari suggests that a relief fragment and two mosaics from the second and third centuries may depict or allude to such imperial aquatic spectacles, but since all three objects depict Cupids and/or mythical subjects, his arguments are not convincing: see Traversari (1960) 121-27.

<sup>73</sup> Traversari (1960) 137-38.

<sup>74</sup> Traversari (1960) 138-39.

<sup>75</sup> Chastagnol (1976) 264-66. The fact that Mérida's amphitheatre had earlier been provided with a shallow basin for such events perhaps supports the suggestion that its circus was also equipped with such a facility subsequently: see Coleman (1993) 57.

<sup>76</sup> Symmachus, *Epistulae*, 4, 8; 9, 141: The apocryphal *Acts of Paul and Thecla*, which describes an unsuccessful attempt to cast Thecla into a basin of 'killer seals' in Antioch, may indicate that aquatic spectacles, at least those involving seals, were not uncommon in the late empire: see *Acts of Paul and Thecla* 34.

<sup>77</sup> Seneca, *Epistulae Morales*, 7, 3-4: Tertullian, *Nat.*, 1, 10, 47: Coleman (1990) 55.

<sup>78</sup> Wiedemann (1995a) 67.

<sup>79</sup> Valerius Maximus 2, 7, 13-14: Livy, *Periochae*, 51, 22-24: Jennison (1937) 47: Loisel (1912) 91-92: Scullard (1974) 184-85.

<sup>80</sup> Pliny, *NH*, 33, 16.

<sup>81</sup> Pollack (1897) 360.

<sup>82</sup> Jennison (1937) 169. The wild animals' refusal to pounce upon their victims, in which Eusebius saw the miraculous intervention of God, may simply have been due to the terror experienced by the animals on these occasions: cf. Eusebius, *Historia Ecclesiastica*, 5, 1, 42; 8, 7, 2-3; 6.

<sup>83</sup> Robinson (1994) 168: ACM, *Mart. Polycarpi*, 12.

<sup>84</sup> Coleman (1990) 57.

<sup>85</sup> Pseudo-Lucian, *Onagros*, 52: Lucian, *Toxaris*, 49: Robert (1971) 320.

<sup>86</sup> Robert (1971) 170, n. 157: 320.

<sup>87</sup> Robert (1971) 320-21, pl. 24, no. 27.

<sup>88</sup> Pollack (1897) 360.

<sup>89</sup> Seneca, *De Ira*, 3, 40: Dio 54, 23, 1: Wiedemann (1995a) 76.

<sup>90</sup> *Digest*, 48, 8, 11, 2: *Codex Theod.*, 9, 12, 1: Marcian, *Digest*, 18, 1, 42: Wiedemann (1995a) 76-77.

<sup>91</sup> Coleman (1990) 46-49.



- <sup>92</sup> Petronius 45: Pollack (1897) 360.
- <sup>93</sup> Josephus, *B.J.*, 7, 373: Marcus Aurelius, 10, 1: Most (1992) 402.
- <sup>94</sup> Martial, *De Spectaculis*, 21, 8, 5, 7: Clement, *I Cor.*, 6, 2: Coleman (1990) 62-66.
- <sup>95</sup> Apuleius, *Metamorphoses*, 10, 30-32, 34.
- <sup>96</sup> Jennison (1937) 162: cf. Martial, *De Spectaculis*, 18, 19(?).
- <sup>97</sup> Suetonius, *Claudius*, 34, 2: Martial, *Epigrams*, 2, 75, 1-5: Scobie (1988) 215-16.
- <sup>98</sup> Kyle (1995) 184.
- <sup>99</sup> Kyle (1995) 184-86: The relatively small number of such animal-bone deposits mentioned by Kyle indicates that the majority of animal carcasses were disposed of by other means.
- <sup>100</sup> Grant Hopcraft, Dept. of Zoology, UBC: private communication.
- <sup>101</sup> Suetonius, *Caligula*, 27, 1. The *SHA* (*Elagabalus*, 21, 2) states that Elagabalus fed pheasants and parrots to his animals, but the veracity of this anecdote is highly suspect.
- <sup>102</sup> Kyle (1995) 184.
- <sup>103</sup> To judge, for example, from Symmachus, who complained about the poor condition of some bears he had had brought to Rome for an upcoming spectacle (2, 76), Roman animal-handlers sometimes had difficulty keeping their stock well-fed and healthy.
- <sup>104</sup> Kyle (1995) 188-89: Romans in fact, unlike many modern omnivores, would have enjoyed the 'gamey' meat of arena animals. Apuleius describes the poor of Corinth eating the carcasses of imported bears which had died prior to their appearance in a spectacle (*Metamorphoses*, 4, 14). Although this account is fictional, the description of the urban poor consuming deceased animals intended for the arena may well have been based on actual practice: See Kyle (1995) 200-201.
- <sup>105</sup> Tertullian, *Apology*, 9, 11: Kyle (1995) 199-200.
- <sup>106</sup> Many of these animals would not have been solely valuable while alive: their hides would have been valuable commodities as well.
- <sup>107</sup> Suetonius, *Nero*, 11, 2.
- <sup>108</sup> Dio 66, 25, 5.
- <sup>109</sup> Suetonius, *Domitian*, 4, 5: Dio 67, 4, 4: Statius, *Silvae*, 1, 6, 75-80: Kyle (1995) 199.
- <sup>110</sup> Martial, *Epigrams*, 8, 7: Kyle (1995) *ibid.*
- <sup>111</sup> *SHA*, *Elagabalus*, 8, 3. The verb *abiecit* used in this passage likely refers, not to the animals themselves, but the tokens which were thrown into the audience at the spectacle in question: see Merten (1991) 164.
- <sup>112</sup> *SHA*, *Elagabalus*, 22, 2.
- <sup>113</sup> Merten (1991) 147-49.
- <sup>114</sup> *SHA*, *Gallienus*, 12, 3-5: Merten (1991) 147-49.
- <sup>115</sup> CIL 10, 7295: Merten (1991) 149-50.
- <sup>116</sup> *SHA*, *Antoninus Pius*, 10, 9; *Marcus Aurelius*, 17, 7.
- <sup>117</sup> *SHA*, *Probus*, 19, 5.
- <sup>118</sup> *SHA*, *Probus*, 19, 2-4: Merten (1991) 147-49.
- <sup>119</sup> *SHA*, *Gordiani Tres*, 3, 6-8.
- <sup>120</sup> *SHA*, *Gordiani Tres*, 33, 1: Merten (1991) 154.
- <sup>121</sup> Merten (1991) 154, 157.
- <sup>122</sup> See Kyle (1995) 202, who notes that the *SHA* nowhere presents such animal distributions as an innovation of later emperors.
- <sup>123</sup> Seneca, *Epistulae Morales*, 74, 7: Merten (1991) 161-62. This practice was also not unheard of in the Greek east: as early as 120 BC, Antiochus VIII gave animals including camels and gazelles to the populace as part of his games in Daphne: see Athenaeus 12, 540: Alföldi-Rosenbaum (1970) 12.
- <sup>124</sup> Kyle (1995) 202-03: Coleman (1996) 56. Other members of the audience would assuredly be delighted to see 'amateurs' of their own ilk attempting to capture various wild animals, while those who succeeded in capturing such game, even if lifelong

urban residents, could subsequently enjoy boasting of their 'hunting prowess' to their peers.

<sup>125</sup> SHA, *Aurelian*, 33, 4.

<sup>126</sup> Pollack (1897) 360.

<sup>127</sup> Seneca, *Epistulae Morales*, 70, 20.

<sup>128</sup> CIL XIII, 2548: It should be noted, for the sake of accuracy, that the first letter of *bestiarius* has been restored; the word could also theoretically be *vestiarius*.

<sup>129</sup> Pollack (1895) 640: CIRh 770.

<sup>130</sup> Robert (1971) 321-22.

<sup>131</sup> Robert (1971) 86-87, n. 23-24.

<sup>132</sup> Robert (1971) 27, 323: For the *familia gladiatoria* see CIL 5, 2541.

<sup>133</sup> ILS 5148, 7559: Wiedemann (1995a) 118.

<sup>134</sup> Pollack (1895) 640.

<sup>135</sup> Robert (1971) 137-38, n. 81.

<sup>136</sup> Robert (1971) 328-29: Ville (1981) 307.

<sup>137</sup> CIL 8, 696: Courtney (1995) 326, n. 118.

<sup>138</sup> Tod (1904) 56: Robert (1971) 107, n. 47.

<sup>139</sup> ILS 5053.

<sup>140</sup> CIL 12, 533: Courtney (1995) 327.

<sup>141</sup> Robert (1971) 130, n. 77.

<sup>142</sup> Robert (1971) 314.

<sup>143</sup> Seneca, *De Beneficiis*, 2, 19, 1.

<sup>144</sup> ILS 5147: Sabbatini Tumolesi (1980) 82, n. 46.

<sup>145</sup> Salomonson (1960) 41-42: Bomgardner (1984) 88.

<sup>146</sup> Martial, *De Spectaculis*, 17, 26, 32: *Anthologia Latina*, 353-54: Rosenblum (1961) 151-52, n. 67-68: Thompson (1989) 31-33. Olympius' great popularity as a *venator* overcame the negative opinion many Romans felt towards the appearance of blacks in general.

<sup>147</sup> Beschtaouch (1987) 678.

<sup>148</sup> Blázquez (1962) 53-54.

<sup>149</sup> Beschtaouch (1987) 678: Toynbee (1996) 83-84.

<sup>150</sup> Second and third century curse-tablets from the amphitheatre in Carthage suggest that *venatores* substantially outnumbered gladiators at that time: see Bomgardner (1989) 93-94.

<sup>151</sup> Toynbee (1996) 31.

<sup>152</sup> Suetonius, *Augustus*, 43, 2: Aymard (1951) 97.

<sup>153</sup> Suetonius, *Claudius*, 21, 3.

<sup>154</sup> Dio 61, 9, 1.

<sup>155</sup> Dio 67, 14, 3: Juvenal 4, 99-101.

<sup>156</sup> Dio 67, 14, 3.

<sup>157</sup> Fronto, *Ad M. Caes.*, 5, 22.

<sup>158</sup> Fronto, *Ad M. Caes.*, 5, 23.

<sup>159</sup> Robert (1971) 179, n. 175; 330.

<sup>160</sup> Robert (1971) 87-90, n. 25: 328.

<sup>161</sup> Cyprian, *Ad Donatum*, 7: Wiedemann (1995a) 30.

<sup>162</sup> *Digest*, 38, 1, 37: Wiedemann (1995a) 28-29.

<sup>163</sup> *Digest*, 12, 1, 11 pr; 30, 51: 16, 3, 26: Wiedemann (1995a) 122: Thompson (1989) 148.

<sup>164</sup> Wiedemann (1995a) 123.

<sup>165</sup> Cicero, *In Vatinius* 17, 40; *Ad Quintum* 2, 4, 5: Ville (1981) 270-71, 292-93.

<sup>166</sup> Ward-Perkins (1984) 114.

<sup>167</sup> Prudentius, *Hamartigenia*, 369-74.

<sup>168</sup> Cassiodorus, *Variae*, 5, 42, 1: Barnish (1992) 90.

<sup>169</sup> Merten (1991) 170.

<sup>170</sup> Jennison (1937) 180-81.

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- <sup>171</sup> Keller (1913) Vol. 1; 33.
- <sup>172</sup> Cassiodorus, *Variae*, 5, 42, 12; Barnish (1992) 93.
- <sup>173</sup> Robert (1971) 324.
- <sup>174</sup> Robert (1971) 87-90, n. 25: 90-92, n. 27: 149-50, n. 114: 152-53, n. 121: 325.
- <sup>175</sup> Robert (1949) 127-28.
- <sup>176</sup> Robert (1971) 90-92, n. 27: 201, n. 219: 205, n. 229: 325.
- <sup>177</sup> Robert (1950) 62; Robert (1971) 149-50, n. 114: 325; Kalinka (1926) 325, 330.
- <sup>178</sup> Pliny, *NH*, 8, 54; Robert (1940) 91, n. 27; pl. 24; Lehmann (1990) 143.
- <sup>179</sup> Martial, *De Spectaculis*, 26. As Sabbatini Tumolesi [(1980) 44, n. 17)] notes, one function of the *lorarius* recorded in a Pompeiian inscription [CIL 4, 7989b] may have been to whip animals reluctant to fight in the arena.
- <sup>180</sup> Robert (1950) 41-43, n. 329; Robert (1971) 90-92, n. 27: 149-50, n. 114: 159, n. 132: 218, n. 264: 325.
- <sup>181</sup> Ovid, *Metamorphoses*, 12, 102-04.
- <sup>182</sup> Pliny, *NH*, 8, 21.
- <sup>183</sup> Robert (1971) 325.
- <sup>184</sup> Volbach (1976) 33.
- <sup>185</sup> Loisel (1912) 130-31.
- <sup>186</sup> Robert (1971) 324: 87-91, n. 25: 90-92, n. 27.
- <sup>187</sup> Robert (1971) 324-25: 87-91, n. 25: 90-92, n. 27: 152-53, n. 121: 205, n. 229.
- <sup>188</sup> Robert (1971) 325.
- <sup>189</sup> Robert (1971) 90-92, n. 27: 149-50, n. 114: 205, n. 229: 325; Kalinka (1926) 324.
- <sup>190</sup> Weeber (1994) 21.
- <sup>191</sup> Robert (1971) 191, n. 191a: 325.
- <sup>192</sup> Kockel (1983) 75-85, pl. 20.
- <sup>193</sup> Martial, *Epigrams*, 11, 69.
- <sup>194</sup> Robert (1950) 61; Robert (1971) 90-92, n. 27: 149-50, n. 114: 152-53, n. 121: 191, n. 191a: 206, n. 233: 326.
- <sup>195</sup> Varro, *De Re Rustica*, 3, 5, 3; Merten (1991) 170.
- <sup>196</sup> Robert (1971) 300; Auguet (1972): 90, pl. 10.
- <sup>197</sup> Cassiodorus, *Variae*, 5, 42, 7; Barnish (1992) 92; Merten (1991) 173. Although Barnish, in his translation of this passage, assumes that a second individual is the subject of the verb 'lures' (*inuitat*), this is not explicit in Cassiodorus' Latin.
- <sup>198</sup> Merten (1991) 173, n. 122.
- <sup>199</sup> Merten (1991) 174.
- <sup>200</sup> Jennison (1937) 180; Loisel (1912) pl. 8. A somewhat similar protective device, a "portable wall of canes", is described in Theodoric's letter to Maximus: see Cassiodorus, *Variae*, 5, 42, 8; Barnish (1992) 92.
- <sup>201</sup> Jennison (1937) facing 167.
- <sup>202</sup> Volbach (1976) 33, n. 10.
- <sup>203</sup> Bomgardner (2000) 218: Theodoric describes a similar wheel (the 'Wheel of Misfortune') in the arena, to which performers were evidently attached in some fashion as it rolled around the arena: see Cassiodorus, *Variae*, 5, 42, 10.
- <sup>204</sup> Volbach (1976) 33-34, n. 11.
- <sup>205</sup> Volbach (1976) 35-36, n. 17.
- <sup>206</sup> Bases for these 'crows-nest' platforms have been found in the theatre at Mytilene: Private communication, Dr. H. Williams, Dept. of Classical, Near Eastern and Religious Studies, University of British Columbia.

### The Capture and Transport of Animals

In order to supply *spectacula*, the Romans were forced to gather various species of animals from throughout the empire and beyond. As we shall see, several different methods were used both initially to capture or obtain the animals, and subsequently to transport them to their ultimate destinations. While the pictorial and literary sources for this animal-trade are not particularly abundant, enough do exist to suggest the scale and expense of these operations.

A good impression of the difficulties encountered by the Romans in transporting various animals can be gained by looking at more recent problems with animal-transport. In 1850, for example, when the first hippopotamus since the Roman era was brought from Egypt to Europe, an entire British army division was assigned to capture the animal. After the hippopotamus was caught and brought to Alexandria, it was shipped to London on a special steamship with freshwater tanks, two cows, and ten goats to satisfy its dietary requirements of water and milk. Even with a steamship, the journey from London to Alexandria and back still lasted several months.<sup>1</sup>

#### *The 'Great Hunt' Mosaic:*

Undoubtedly the most famous piece of artistic evidence for the capture and transport of arena animals by the Romans is the massive 'Great Hunt' mosaic from Piazza Armerina, depicting the widespread capture of various animals by the Romans (Fig. 24). Exotic animals such as lions, ostriches, wild boars, and gazelles are depicted, but particularly unusual is the gryphon depicted squatting on top of a cage containing an unfortunate hunter. The creature, however, is apparently meant to be real rather than mythical: since ancient authors such as Timothy of Gaza (in the sixth century) actually describe the proper technique of capturing gryphons as if

they actually existed, this rather incongruous scene does fit in with the general hunting theme of the mosaic, and does not necessarily have some symbolic function, apart from alluding to India where the creature supposedly lived.<sup>2</sup>

A number of other geographical indicators are included in the mosaic. The phoenix in the 'India' lunette at the far right side of the mosaic, like the gryphon, suggests that the captured animals in the mosaic come from the entire known world.<sup>3</sup> Real animals such as the bison in the mosaic represent those captured in India, while others, such as the lion, represent those native to Africa, an interpretation suggested by the personifications of these two lands flanking the mosaic on either end. Several of the individual hunting-scenes in the mosaic are depicted quite realistically, but the objective of the scene overall, like that of many imperial *spectacula*, is to symbolize through various exotic animals Roman hegemony over the entire world, even in areas where no such control in fact existed.<sup>4</sup>

The focal point of the mosaic, located between its 'African' and 'Indian' halves, depicts the unloading of animals onto an island thought to represent the port of Ostia. Various animals, including an ostrich and tiger, are being brought down ramps from ships on either side of the mosaic, while an elephant, already on dry land, is inspected by an official. At least four other officials supervise the unloading from above. Settis suggests that at least one of these individuals, most likely the one standing directly in front of the elephant, may be a *procurator ad elephantos* (or the late imperial equivalent), a position attested epigraphically for the earlier empire.<sup>5</sup>

An interesting feature of this section of the mosaic, overlooked by most scholars, is the "MA" brand seen on the ear of the elephant standing on the island. Settis suggests that this brand may have represented the first letters of the owner's name, presumably the imperial official overseeing the capture and transport of the various animals in the mosaic (Fig. 25).<sup>6</sup> Settis' suggestion is plausible, although one notes that none of the other preserved animals in the mosaic, including a second elephant being loaded onto a ship, bear such a brand. Since the possession of

elephants was an imperial monopoly at this time, the letters MA may represent not the official responsible for the animal's capture and shipment, but the emperor into whose possession it came. It would be sensible for an elephant coming into imperial possession to be branded upon its arrival in Italy, as the mosaic suggests. The brand could denote either the emperor Maximian or Maxentius (i.e. M(aximianus) A(ugustus) or MA(xentius)), since the phase of the villa during which the 'Great Hunt' mosaic was laid is commonly assumed to date between 300 and 320, a period when both of these rulers were active. If this theory is correct, the brand would signify the official's successful delivery to Italy of the elephant, the most prized exotic animal amongst the Romans, just as the mosaic's central section in general symbolizes his fulfillment of duty in providing Rome with other species of animals.<sup>7</sup>

#### *Sporadic Sources of Animals:*

Although the Romans themselves usually captured the majority of wild animals for their *spectacula*, this was not always the case. On occasion, rather than being captured in the wild by the Romans, animals were given to various Roman emperors as a symbol of submission or respect by various foreign monarchs. A precedent for this practice in the Republican period was the 100 lions given by king Bocchus of Mauretania to Sulla for his praetorian games of 93 BC. One of the gifts given to Augustus on Samos by visiting Indian ambassadors in 20/19 BC was an unspecified number of tigers, while at another point in his reign the emperor was visited by Chinese and Indochinese(?) ambassadors bringing him elephants amongst other gifts.<sup>8</sup> It is probable that later Roman emperors were also supplied with animals by various client and allied kings on various other occasions unrecorded by the ancient sources. Pressure exerted on these monarchs from time to time by the Roman government would be an ideal way to obtain different exotic animals without the usual effort and expense.<sup>9</sup>

The practice of foreign rulers presenting Roman emperors with animals as gifts evidently continued into the later empire. According to the panegyric composed for Maximian, among the gifts given to him by the Persian king as a sign of subservience were *eximiae pulchritudinis feras*. Late in Constantine's reign, an Indian embassy presented the emperor with numerous gifts, including various exotic animals. In 389 another Persian embassy sent gifts including *triumphales bestiae*, presumably elephants, to Theodosius. A tamed tiger from India was sent to the eastern emperor Theodosius II in 450, while in 496 Anastasius received an elephant as a gift from the king of India, a term which in this case likely refers to the Aksumite kingdom, territory now located within modern-day Ethiopia.<sup>10</sup> As late as 520, unnamed rulers in Africa evidently sent various wild animals to Rome as a mark of respect: *...muneribus amphitheatralibus diversi generis feras, quas praesens aetas pro novitate miraretur...Africa sub devotione transmisit*.<sup>11</sup> The lower register of the Barberini diptych, commonly supposed to date to the reign of Justinian (521-565), depicts various barbarian monarchs clad in eastern and 'Scythian' costume, bringing tribute to the emperor, including a lion, tiger(?), and what appears to be an Indian elephant.<sup>12</sup>

Another way in which the Romans periodically obtained animals for their *spectacula* was as a by-product of successful warfare. In the mid-third century in particular, if the evidence of the SHA is to be believed, the Romans obtained a number of Indian elephants in the course of their wars with the Sassanian Persians. According to this source, Severus Alexander (222-35) captured thirty war-elephants from the Persians, of which eighteen were ultimately brought to Rome, and ten survived into the reign of Gordian III (238-44).<sup>13</sup> The ten elephants originally captured by Severus Alexander were possibly supplemented by Gordian III's own campaigns against the Persians: the SHA records that Gordian himself had sent twelve of the thirty-two total elephants in the capital to Rome. It has been suggested

that these animals were sent back from the eastern frontier by Gordian during his own campaign against Persia.<sup>14</sup>

The Romans may also have periodically exacted animals from their own subjects. Epigraphic evidence suggests that the African municipalities or neighbouring tribes may have supplied animals for the *spectacula* as part of the taxation or tribute expected by Rome. An inscription from Banasa in Mauretania Tingitana, dated to 216, thanks unnamed individuals for supplying the emperor with *caelestia animalia*, apparently rewarding them with a reduction in taxes for these and other services. These *caelestia animalia* have been identified as either elephants or lions used in imperial *spectacula*.<sup>15</sup> Unfortunately the subject of this inscription is unclear: it may refer to the Mauretanians themselves, the North Africans in general, or the inhabitants of the tribal areas outside of the cities of Mauretania Tingitana.<sup>16</sup>

#### *The Importation of Exotic Animals:*

Apart from the more unusual methods of obtaining animals outlined above, the majority had to be captured in their local habitats by hunters and imported by *editores* prior to the *spectacula* in which they were to appear. The expansion of Roman power and territory during the early empire, as well as the increasingly elaborate infrastructure organized to capture and transport animals for the games, meant that a greater variety of species such as tigers and bison could be introduced into imperial spectacles than had been done in the Republican period, when the proportion of local animals participating in such events appears to have been significantly higher.<sup>17</sup> Although North Africa continued to be an important source for the animals displayed at various imperial spectacles, the Roman conquest of Egypt, as well as areas of northern Europe, led to both of the latter areas becoming important suppliers of wild beasts as well. In particular bears from northern Europe,



such as the Caledonian specimen witnessed by Martial in the Colosseum, appear to have become frequent participants in *spectacula* staged under the empire.

Although specific information about the range of animal-capture is often lacking in the ancient sources, a few authors do nonetheless make some general statements concerning the extent to which the Romans were willing to go to supply their *spectacula*. Petronius gives some impression of the range of the imperial animal-trade in the *Satyricon*:

The wild beast is searched out in the woods at a great price, and men trouble Hammon [Ammon] deep in Africa to supply the beast whose teeth make him precious for slaying men; strange ravening creatures freight the fleets, and the padding tiger is wheeled in a gilded palace to drink the blood of men while the crowd applauds.<sup>18</sup>

To judge from this passage, Roman hunters (or their agents) were active in remote areas of Egypt (such as, perhaps, in the vicinity of Ammon's shrine in the Siwah oasis), and as far east as Hyrcania and India, regions where they appear to have obtained the tigers used in their *spectacula* (see page 259).<sup>19</sup> The woods mentioned by Petronius may perhaps be those of northern provinces like Germania Inferior, areas where, as will be shown, the Romans captured such animals as bears. Writing under Domitian, Statius describes the animals at a particular *spectaculum* as ...*Scythicas Libycasque et litore Rheni et Pharia de gente feras....*, meaning that they had been gathered from beyond the northeast frontier, as well as North Africa and Egypt.<sup>20</sup>

With the expansion of the empire, and the concomitant increase in the number and variety of available animals, even smaller cities, such as those of Greece and Asia Minor, could entertain their citizens on occasion with exotic fauna. An inscription from Beroia honours a certain Claudius Popillius Python for, amongst other undertakings, staging a *θηριομαχία* featuring all kinds of native and foreign animals. Unfortunately, the exact species of animals obtained by Python are not specified by the inscription.<sup>21</sup> A similar inscription from Ancyra records a *κυνήγιόν τε πολυτελές καὶ παράδοξον*, which was presumably so called because of the variety of animals exhibited on that occasion.<sup>22</sup> Coins from Byzantium depicting ostriches,

bears, and lions were all evidently minted to commemorate the variety of animals at a *venatio* staged there during the reign of Severus Alexander.<sup>23</sup> Finally, amongst the animals depicted on a *venatio* mosaic from Cos is a bear labelled Νωρικὴ, presumably because it was imported from the province of Noricum (modern-day Austria).<sup>24</sup>

Other epigraphic evidence allows us to reconstruct with more certainty the various types and origins of animals procured for particular *spectacula*. An inscription from Mytilene dating to the first century BC indicates that a prominent citizen, Potamon, acquired animals from nearby Mysia for one of his *venationes*. These animals may have included bears and boars, which are known to have been numerous in that region in antiquity.<sup>25</sup> Another inscription from Sagalassos mentions a seemingly more elaborate *spectaculum*, for which the magistrate Tertullos had obtained bears, panthers, and lions.<sup>26</sup>

In certain instances it is difficult to determine for certain whether or not a given event involved imported or local animals. Three Ephesian inscriptions record *venationes* at which lions, ζῶα λιβυκά, took part. The first inscription, dedicated between 180 and 192, records the death of 25 of these animals at one such spectacle, while the last two inscriptions, datable to the third century, mention the slaughter of ζῶα λιβυκά at games which both included combat between thirty matched pairs of animals and *venatores* (ζυγοὶ ἀποτόμοι).<sup>27</sup> Robert maintains that the Ephesian magistrates must have required imperial permission to obtain this quantity of lions for their *venationes*, which would perhaps be plausible if the lions had indeed been shipped from North Africa to Asia Minor.<sup>28</sup> The evidence, however, which Robert adduces for imperial restrictions on the trade in lions, such as the Theodosian Code, is much later than the third century, which possibly indicates that such restrictions did not exist at the time period in which the *venationes* were being staged at Ephesus.<sup>29</sup>

In the case of the Ephesian inscriptions, however, the adjective λιβυκόν may merely denote the animals in question as being lions, rather than indicating their

region of origin.<sup>30</sup> If these animals were in reality native to Asia Minor, the Ephesians may just as easily have imported them on their own without relying on imperial aid or permission. The Asiarch theoretically could have obtained his lions from the hinterland of Asia Minor, since as we will see, lions for imperial *spectacula* were being captured in that region as late as the fifth century.<sup>31</sup> One is tempted to conjecture that for obvious reasons of expenditure the Asiarch's lions were captured in Asia Minor rather than Africa, and that the animals may have merely been called 'Libyan' in the inscription to give more of an 'exotic' flavour to the *venatio* in question.<sup>32</sup>

Apart from the epigraphic evidence just discussed, there is also some literary evidence for the importation of animals in the Greek east. In the *Metamorphoses* Apuleius describes the Corinthian *duumvir* Thiasus travelling to Thessaly to purchase some of its famous animals for his planned *venatio* back home.<sup>33</sup> Although the character of Thiasus is fictional, the obtaining of animals for Corinthian spectacles from far afield was evidently not. A letter attributed to Julian rebukes the Corinthians for frequently spending so much money on buying bears and panthers for their *venationes*.<sup>34</sup> Three letters of Libanius, written in Antioch at approximately the same date as Julian's letter to the Corinthians, indicate that the citizens of the latter city were not alone in seeking the best imported animals for their *spectacula*. On behalf of his brother organizing games in Antioch as part of his official duties, Libanius writes to a certain Andronicus, the imperial representative in Phoenicia, in an attempt to obtain some of the famed animals from that region, including bears and leopards.<sup>35</sup>

#### *Animal Spectacula in Smaller Centres:*

As might be expected, animal *spectacula* in the provinces and smaller towns of Italy and the rest of the empire most often featured animals which were available

locally, and therefore far less expensive than imported beasts.<sup>36</sup> Wild boars and bulls, which were widespread throughout the empire, were frequent participants in provincial spectacles: bears were also often involved in such events, except in Africa, where there was likely not as large a native population of these animals as elsewhere in the empire.<sup>37</sup> Lions were common in spectacles staged in the eastern provinces, as well as in the Aegean, areas that were relatively close to the sources of supply for such animals, but were, judging by the artistic evidence, extremely rare in areas such as Gaul. In all probability, these animals frequently appeared in the *spectacula* of North Africa and Spain, since these areas, like Asia Minor, also had populations of these animals close at hand.<sup>38</sup> Conversely, tigers are not known for certain to have participated in events outside of Rome: the capital was likely one of the few cities in the empire with enough wealth to afford importing these relatively rare animals.<sup>39</sup>

The use of leopards in *spectacula* also appears to have been largely limited to areas where they were locally available. Leopards, along with bears, bulls, and boars, were one of the common animals used against Christian martyrs, but this may reflect the fact that the majority of such martyrdoms occurred in Africa and the eastern provinces, near to populations of such animals, rather than to their ubiquitousness throughout the empire.<sup>40</sup>

*Editores* in smaller centres, apart from using predominantly local animals, were normally forced to use a limited number of creatures, because of the expense involved in their purchase. Even in known cases from the Greek East where *spectacula* were staged over more than one day, the actual number of animals displayed may not have been very impressive. In the series of spectacles recorded by the Gortyn inscription, three days were devoted to combat between animals (θεατροκυνηγεία), and a further three days to combat between animals and *venatores* (σιδηροκόντρα), as opposed to the four days set aside for gladiatorial combat. The inscription specifically records that the *editor* Volumnius was free to have as many

animals as he wished slaughtered in the *θεατροκυνηγεία*, thereby suggesting that the usual supply of animals for such events was indeed limited. In the case of the *σιδηροκόντρα*, only two pairs of combatants fought each day, thereby meaning that only a maximum of six animals were killed in this event.<sup>41</sup> More animals may have been slaughtered at the *venatio* staged over a five day period in Ephesus between 180 and 192. The relevant inscription records that the Asiarch slaughtered 25 lions (ζῶα λιβυκά) on this occasion, although an average of five lions per day does not seem to be an impressive amount, especially when one considers that the official in question likely had several months to procure the animals for this special event.<sup>42</sup>

Other evidence tends to confirm that, as one might expect, readily available animals were normally employed in even multi-day *spectacula* in the Greek world, as opposed to more exotic varieties. An inscription from Pergamon honours a priestess of Athena (?) for staging a two-day *ταυροκαθάψις*, while a relief from Smyrna depicts some of the bulls from a similar spectacle held over the same period of time in that city.<sup>43</sup> Another relief commemorating a three-day *venatio* staged in Sardis depicts a bull, two felines or dogs, as well as other animals.<sup>44</sup> A relief from Smyrna commemorating a *venatio* of the same duration shows two bulls, a bear, and an unidentified quadruped.<sup>45</sup> If more exotic animals had participated in either of these two spectacles, they would surely have been depicted in preference to the commonplace animals seen on the reliefs. The most unusual animals found on the various other *venatio* representations listed by Robert are a seal and an ostrich: the other animals in these scenes, such as wild boars and bears would have been even less trouble for the various magistrates in the Greek east to obtain for their spectacles.<sup>46</sup>

*Animal Capture and Containment:*

As will be seen below, much of our evidence for animal-capture in antiquity comes from contemporary art in various media. It should be noted, however, that one must sometimes refrain from interpreting the depictions of mosaics and wall-paintings too literally. It has been argued, for example, that hunt mosaics from the Syrian metropolis of Antioch, which portray the slaughter of animals, rather than the scenes of capture and transport found in the mosaics of North Africa and Piazza Armerina, argue against extensive animal-capture in the region. These mosaics have been taken as evidence that hunting in Syria must have been primarily recreational, unlike the commercial hunting of North Africa.<sup>47</sup> The Antioch mosaics, however, may merely be part of a long tradition of generic hunting-scenes in the Greek East, rather than accurately reflect contemporary hunting practices in Syria, which included exotic animal capture.

The favoured technique of capturing wild animals for the games appears to have been through the use of nets and snares, as confirmed by numerous pieces of artistic and literary evidence discussed throughout this work. Oppian succinctly expresses the common implements of hunting as follows:

Ξυναὶ θηροσύναι τε λίνων ξυναὶ τε ποδάγραι.  
 Ξυνὰ δέ τ' ἀνθρώποισι ποδωκέα πάντα γένεθλα  
 ἵπποις ἡδὲ κύνεσσι διωκόμεν...<sup>48</sup>

In a similar fashion, Claudian describes the process of capturing and transporting animals for one of Stilicho's shows in the later empire: *retibus et clatris dilata morte tenendae ducendaeque ferae*.<sup>49</sup>

One of the more unusual variants of hunting with nets was possibly the so-called water-trap, illustrated in a mosaic from Utica (Fig. 26). The mosaic depicts a number of animals, including a boar, deer, ostrich, and leopard(?), surrounded on three sides by an outstretched net. At the bottom of the scene, hunters on small skiffs are beginning to pull together the ends of the nets. A small dog between the boats is

presumably meant to represent the group that originally drove the animals into the water. The intention of the hunters in the mosaic is clearly to capture their quarry alive rather than drown them.<sup>50</sup> One should however note that this curious technique possibly did not exist in reality, but may have been the invention of a mosaicist making the transition between Nilotic and more realistic hunting-scenes in his or her own work.<sup>51</sup>

Although nets were undoubtedly the most common implement used to capture animals, a number of other methods were also used by hunters. A relatively common method of capturing individual animals involved the caltrop, a device consisting of a framed noose attached to a log, which would be hidden in the ground for an unsuspecting animal to step into. Xenophon specifically describes the use of the caltrop for deer, while Grattius recommends its use for a variety of woodland animals: Jennison, without citing a source, states that such a device was commonly used for those hunting boars, deer, antelopes, and even elephants.<sup>52</sup> Another device that appears to have enjoyed widespread use among ancient hunters, at least those pursuing the wild ass, was the lasso. Arrian describes hunters using lassoes to capture these creatures, while in one of the subsidiary scenes of the fourth century Hippo Regius hunt mosaic, a Numidian horseman is shown chasing a wild ass using just such an implement.<sup>53</sup> Pit-traps were another common method of capturing wild animals in antiquity, to be discussed in the context of the individual species detailed below.

Both the Augustan 'hunting-poet' Grattius and his third century counterpart Nemesianus record the use of feathered lines (*formidines*) as an aid in capturing a wide variety of animals.<sup>54</sup> Grattius describes such lines as normally being strung with a combination of vulture and swan feathers, the colour and smell of which would drive the animal away and into a waiting net or snare. Although Grattius states that stags were the usual creatures captured with the aid of this device, he adds that by dyeing the feathers with Libyan vermilion, the *formido* could also be used in

hunting other animals.<sup>55</sup> Nemesianus adds that the feathers of geese, cranes, and other unnamed birds (flamingoes?) with bright plumage could be also used for such lines, not only to help capture stags, but bears, boars, wolves and foxes as well.<sup>56</sup>

Various types of evidence also provide us with some information on the types of cages the Romans used to capture and transport various animals, cages which the poet Claudian refers to as *domus ilignae* or *caveae*.<sup>57</sup> The works of writers such as Lucan and Livy contain rather striking metaphors involving the animals trapped in such cages, confirming the relative ubiquitousness of these receptacles in late Republican and early imperial Rome, as well as that of the spectacles they supplied. Livy compares the wrath of the Thracians in battle to that of wild animals shut in cages, while Lucan compares Caesar, surrounded by enemy troops in Alexandria, to an animal breaking its teeth on the bars of its cage.<sup>58</sup>

A mosaic from Carthage-Dermech, dating to the early fourth century, depicts the capture of a lioness in one of these receptacles (Fig. 27). The animal strides from her cave-lair towards a cage reinforced by diagonal boards on either side. A panel on rollers is attached to the front of the cage: a kid on the panel serves as bait for the lioness. One hunter crouches behind the cage while another kneels on top of it. The first hunter, after the animal has spotted the bait, presumably pulls the panel into the cage so as to attract the lioness within, while the second then quickly closes the front of the cage behind the animal.<sup>59</sup>

Another cage, similar to that depicted on the Carthage-Dermech mosaic, is seen in a fourth-century mosaic from the Esquiline depicting a bear-hunt (Fig. 28). The cage in the latter mosaic is reinforced by diagonal metal bars on either side, and has an attached panel acting as a ramp to its entrance. The panel appears to be pulled up by drawstrings on either side of the cage. The bait for the bear is strung from the top of the cage. The bear, enclosed in an area surrounded by netting of some type, is driven towards the cage by a hunter and his dogs. Another hunter crouched on top is responsible for dropping the front panel of the cage into position after the bear has



been attracted within by the bait. He can then raise the ramp with the drawstrings and thereby reinforce the front of the cage against any attempt by the animal to escape.<sup>60</sup>

A similar cage is seen in a contemporary mosaic from the house of Isguntus in Hippo (Fig. 29). The cage, whose entrance is covered by a sliding plank, is reinforced by nails and diagonal supports. The animals, enclosed in a circle of netting and torches, are chased into the cage by hunters protected by shields. In this case the bait, consisting of a sheep, is placed behind the cage.<sup>61</sup> Another cage with diagonal supports and a sliding front panel, similar to those discussed previously, is depicted in another scene from this mosaic. In this case the cage is pulled on a cart by two mules and escorted by two men armed with javelins.<sup>62</sup>

One of the paintings from the tomb of the Nasonii depicts a leopard being driven into a cage by hunters armed with spears and shields (Fig. 30). Another leopard, presumably too unruly to be captured, is being dispatched by them. One of the hunters, as in the scenes discussed previously, is perched on top of the cage to close it after the leopard enters. Although there is no sign of bait used in this scene, Bertrand suggests that a mirror may have been placed in the cage to attract the leopard by its reflection. One of Claudian's poems mentions such a mirror being used to confuse and slow up felines chasing hunters.<sup>63</sup>

A scene from the 'Great Hunt' mosaic of Piazza Armerina also depicts the capture of a leopard in a cage (Fig. 31). The animal cautiously approaches a large cage behind which a group of hunters, armed with spears and shields and wearing wreaths of leaves, have taken shelter. The hunter directly behind the cage crouches over it, apparently preparing to close the front of the cage behind the leopard after it has entered. A goat has been strung up at the rear of the cage to draw the leopard in.<sup>64</sup>

The similar cages depicted in these scenes may represent the standard types used by those capturing animals in the late third and early fourth century.<sup>65</sup> The

lion cages shown on the Villa Medici sarcophagus are somewhat different in form from those depicted in the mosaics, but Bertrand attributes this discrepancy to 'artistic licence' rather than any real structural difference, asserting that as depicted the receptacles on the sarcophagus almost appear too fragile to contain lions (Fig. 32).<sup>66</sup> The cages are higher than they are wide, and buttressed by a single horizontal bar.

An alternative explanation for the appearance of the cages on the Villa Medici sarcophagus is that they are meant to represent iron, rather than wooden, containers. Perhaps at some point after capture the lions were transferred to iron cages in order to make feeding them on the open sea easier. It would obviously be safer to throw food to the animals through the bars of an iron cage rather than have to open the front panel of a wooden cage to feed them.

Different varieties of cages are found on the 'Great Hunt' mosaic from Piazza Armerina. The cages on board one of the ships in the mosaic have grilled front panels and are also taller than they are wide, like the cages on the Villa Medici sarcophagus (Fig. 33). One type of cage transported by cart in the mosaic also has a grilled front panel, while another has a solid wooden panel. Another container in the mosaic, possibly meant for tigers, consists of wooden planks reinforced by metal or leather straps.<sup>67</sup>

The various depictions of hunters and their cages suggest that, as one might expect, different techniques were used to capture different animals.<sup>68</sup> Hunters, for example, were evidently far more careful in capturing lions than other dangerous animals. While the proper complement of hunters could chase other animals into their cages without too much difficulty, this aggressive technique was evidently avoided with larger felines like lions. Fortunately for the Romans, the lion was confident enough to stride up to a cage of its own accord, provided it contained sufficient bait. On the Carthage-Dermech mosaic, a cage with bait was placed in front

of the lioness' lair to lure her, while two hunters stood by and waited to trap her inside.

Hunters evidently took a more active role in the capture of bears, as shown on the Esquiline mosaic. While a cage with bait was still used in this capture, the bears were almost forced into it by the pursuing hunters and dogs, as well as the netting surrounding and funnelling them towards it. Hunters and netting were also used in the capture of animals shown on the Hippo mosaic, while heavily-armed hunters captured the leopards depicted in the painting from the tomb of the Nasonii. It is unclear in the latter two examples whether any bait was placed in the cages or not.

Although the artistic evidence just cited indicates that the standard cage in which animals were captured was a small wooden one with a sliding door, reinforced with strips of iron, such a container could not be used for shipping animals long distances to their ultimate destinations. Once the captured animal had been somewhat mollified by the darkness of its initial cage, a substantially larger and better-ventilated container, with iron bars on at least one side, was necessary for transport. Symmachus, for example, speaks of animals commonly brought to Rome in *ferreis caveis*, presumably cages with iron bars. Such containers would ensure adequate ventilation for the animals inside, but would not, when shuttered, be drafty enough to entirely dissipate body heat in colder climates. According to Jennison, lions and tigers in modern travelling circuses can live comfortably for years in similar cages only 2.5 by 1.2 metres in size.<sup>69</sup>

In the case of certain animals, special arrangements were made for their enclosure during the journey to their destination. Bear cages were designed to be low, narrow, and tightly-sealed, with only a single opening on the front, in order to prevent the bear from having enough space to extend its paws and tear its cage apart.<sup>70</sup> The especially confined conditions under which bears were transported may have often led to their death either during or shortly after transport. Both Apuleius and Symmachus record such problems with bears procured for *venationes*, although

the spectacle described by the former is admittedly a fiction.<sup>71</sup> Conversely, harmless herbivores could be transported in simple cages with only wooden bars. Some might even be allowed to wander the deck of the ship during their voyage.<sup>72</sup>

### *The Transport of Animals:*

Once animals had been captured, they still had to be transported to the towns or cities in which they were to appear, sometimes hundreds of kilometres distant from where they had originally been seized. The shipment of animals for a given show often took a great deal of time, particularly in the case of large *spectacula* involving numerous animals from various locales. The preparation times for various events listed by the ancient sources also illustrate the general slowness of animal-transport in antiquity. The late historian Malalas, for example, records that under the emperor Commodus a period of six months was set aside in Antioch for the collection of animals to be used in the *venationes* celebrating the quadrennial festival of Ares and Artemis in that city.<sup>73</sup> Although Malalas is not the most trustworthy of ancient historians, some confirmation of the time needed to gather animals for a major *spectaculum* can be found in the letters of Symmachus. Preparing for praetorian games which he originally thought would occur in 400, Symmachus began to arrange for the shipment of animals to Rome for this spectacle as early as 398.<sup>74</sup> The difference in preparation times recorded by these two sources might be explained by the difference in scale between the praetorian games in Rome and the festival games in Antioch, as well as the fact that the latter city was closer to many of the common sources of the animals used in Roman spectacles, such as Egypt.

Animals were transferred to waiting transport vehicles, whether ships or wagons, by a variety of means immediately after their capture. The foregoing pieces of evidence suggest that captured animals were usually transported to ships in their

cages either by carts or by men with poles. Certain animals, however, like boars, could be carried in the nets they were captured in, as seen in the 'Great Hunt' mosaic from Piazza Armerina.<sup>75</sup> Other larger or heavier animals, like elephants or ostriches, had to be loaded on board without the use of such devices. The 'Great Hunt' mosaic depicts animals such as ostriches, gazelles, rhinoceroses, and bulls being dragged towards departing ships.<sup>76</sup> Another scene from the mosaic, similar to the Veii piece discussed below, shows an elephant with ropes attached to his feet being loaded onto a ship: two attendants on board the vessel pull on the elephant from the front, while a third holds a rope behind the animal.

Although animals for the games had to be transported by land in some circumstances, the predominant and preferred method of transport was by sea, which was of course much quicker and cheaper than land transportation.<sup>77</sup> Maritime shipping, however, was by no means rapid. In the Roman period, shipping times for captured animals were much longer than in modern times, particularly when the different animals for a given spectacle were gathered from a variety of locales. Transport-times from Egypt and the eastern provinces are of particular importance, since many of the animals employed in various *spectacula* came from those regions. The voyage from Alexandria to Rome, for example, took on average some twenty-five days in antiquity, while that from Antioch to the capital appears to have taken at least a month.<sup>78</sup>

Animal suppliers attempted to make sea voyages as short as possible, since the animals could become sea-sick during the trip and were difficult to feed on the open sea. A further potential problem was the weather: although ship captains tried to sail only in calm conditions, delays and loss of cargo were often caused by sudden storms.<sup>79</sup> The African animals ordered by Pliny's friend Maximus for his *venatio* at Verona missed the show because of bad weather, while on more than one occasion, three hundred years later, animals ordered by Symmachus for such *spectacula* were either destroyed or delayed by similar weather.<sup>80</sup>

Much of the Roman seaborne trade, including that involving animals, appears to have built upon trading-contacts previously established by the Ptolemies. The transport of large numbers of exotic animals to Rome was greatly facilitated by the expansion of Ptolemaic sea-borne trade and transport during the imperial period. For example, while twenty ships per year are said to have sailed under Ptolemy XI from the port of Myos Hormos in Egypt to India, an important source of wild animals, 120 ships per year followed the same route under Augustus.<sup>81</sup> It was perhaps because of the increased exploitation of the sea-route between India and Egypt that emperors like Augustus and Claudius were able to include animals like tigers in their spectacles.<sup>82</sup>

The Romans benefitted also from the pre-existing Ptolemaic infrastructure in Egypt for the procurement and transport of elephants from Ethiopia and the territory of the *Trogodytae*, one of the principal areas from which these animals were imported, according to Pliny the Elder.<sup>83</sup> Primarily under the direction of Ptolemy II (283-46 BC) and Ptolemy III (246-21 BC), various depots and stations were established along the western coast of the Red Sea, as far south as the Straits of Aden, from which military expeditions were dispatched to obtain elephants in present-day Ethiopia and Somalia. Special ships called ἐλεφαντήγοι were specifically developed by the Ptolemies to transport these elephants. These ships were large, open vessels with a depth of only 1.5 to two metres. The captured elephants were apparently either transported to Berenike and then along the caravan routes to the Nile and thence to Memphis, or along the canal from the Gulf of Suez to the Nile and Alexandria.<sup>84</sup> The Romans, like their predecessors, may well have shipped Egyptian grain for export on the southbound elephant-transports in exchange for the animals. By the Roman period, however, the supply of elephants from Ethiopia may have been somewhat more limited, especially since the Ethiopians themselves employed war-elephants in their armies.<sup>85</sup>

Like the Ptolemies, the Romans were undoubtedly forced to modify regular-sized ships in order to transport elephants over long distances. The average Roman transport vessel had a carrying capacity of 120 to 200 tons, but craft of this size would have been inadequate for all but the shortest elephant voyages.<sup>86</sup> The average adult elephant weighs approximately four tons, and requires 27-35 kilograms of food and 50-250 litres of water per day: a ship carrying 10 elephants on a journey of a mere two weeks on the open sea would therefore require at least a 40 ton carrying-capacity for food and water alone.<sup>87</sup>

Most of the animals employed in various spectacles, including elephants, could be shipped on modified horse-transports (*hippagones*), vessels commonly used to convey race-horses from North Africa to Rome. A mosaic from Althiburos, dating to approximately 250, depicts one of these vessels (Fig. 34). Since these boats lacked sails, they were evidently often towed behind other vessels. Planks were placed behind and in front of the horses to hold them secure during the voyage.<sup>88</sup>

Other types of ships used by the Romans to transport animals are seen on a sarcophagus lid from the Villa Medici and in the 'Great Hunt' mosaic from Piazza Armerina. The former item, dating to approximately 270, depicts three sailors steering a ship with cages into Ostia, as indicated by the lighthouse on the right side of the scene. This ship, possessing both oars and a sail, appears to be of the *corbita* type. The Piazza Armerina mosaic depicts two types of ships, one with a sail and the other with both sail and oars. The sailing vessel, which carries elephants, is evidently of the *actuaria/oneraria* type. All these depictions of Roman animal-transports suggest that they normally used sails, but could also rely on oars when the need arose.<sup>89</sup>

Because of the uncertainties of maritime transport in antiquity, animals arriving at a coastal city might have to be stored in pens for some time before being shipped to their ultimate destinations. An example of the type of enclosure used at African cities involved in the animal-trade may have recently been discovered at

Cyrene. Given the city's extensive trading contacts, particularly with the African interior, a number of the many African animals employed in Roman spectacles must have passed through Cyrene.<sup>90</sup> The enclosure, built into a bend in the city-wall near its southeastern corner, originally consisted of a walled trapezoid approximately two hectares in size, surrounded by stone walls 4 to 4.5 metres high (Fig. 35).<sup>91</sup> Access to the enclosure was provided by openings in both the east and west walls: that in the east was located in close proximity to the road taken by caravans approaching the east gate of the city.<sup>92</sup> The masonry of the enclosure walls suggests that it was constructed in the second century BC, but it appears to have continued in use until at least the third century or fourth AD.<sup>93</sup> Another similar, but slightly smaller enclosure south of the city appears to have served traders coming from western Cyrenaica.<sup>94</sup> Although scholars have normally assumed that the larger structure was used for caravan pack-animals arriving in Cyrene, it would also have been ideally suited, in the Roman period, for more exotic animals awaiting transport to Rome and elsewhere.

The animal trade between Italy and Africa appears to have been organized predominantly by shipping companies in the African ports and their representatives in Ostia.<sup>95</sup> Caravans brought wild animals from the African interior to the ports of Lepcis, Oea, and Sabratha, and possibly Thabraca as well, from where they were shipped to Rome and elsewhere by these corporations.<sup>96</sup> The wealth of Sabratha, as exemplified by its large amphitheatre, was likely linked to the profits earned by this trade in wild animals.<sup>97</sup> A mosaic from the Square of the Corporations in Ostia, dating to approximately AD 150, may represent a shipping company from one of these African ports. The mosaic in question depicts an African elephant, stag, and boar, which suggests that the office that commissioned it was involved in the animal trade (Fig. 36).<sup>98</sup>

Numerous other inscriptions, particularly from the later empire, record *navicularii* in Africa, some of whom likely shipped animals as well as grain to



Rome.<sup>99</sup> An Ostian inscription dating from approximately 180 to 200 records shippers from Hippo Diarrhytus in Tunisia, while two other inscriptions from the same site mention shippers from Carthage and *navicularii Africanii*.<sup>100</sup> An inscription found in Carthage suggests that these shippers were closely linked to estate owners in Africa. The former may not actually have owned their ships, but merely leased them from the latter.<sup>101</sup>

Further epigraphic evidence suggests that merchants from Sardinia may have played a role in the transport of both African and Sardinian animals to Rome. Ships coming from Gaul and Spain, as well as Africa, all made regular stops in Sardinia on their way to Rome, and Sardinia, like Africa, was an important supplier of grain and animals to Rome, particularly during the later empire. Ostian inscriptions record the activities of merchants from Turris and Karales, the two chief ports of Sardinia, during the second and third centuries in Italy.<sup>102</sup> Another inscription from Ostia records a *dominus navium Afrarum universarum item Sardorum*, indicating that shippers from the two areas may have worked in unison in transporting their wares to Rome.<sup>103</sup>

Unfortunately, the literary sources, apart from the epigraphic evidence just discussed, provide relatively little information on the 'mechanics' of animal transport: Roman and Greek authors appear to have found the organizational aspects of the spectacles more or less irrelevant to their work.<sup>104</sup> Far more information on animal transport can be found in various pieces of Roman art. Numerous Roman mosaics and sarcophagi reliefs from the second to fifth century AD, for example, provide some evidence of how various animals were safely shipped from Africa to Rome and elsewhere.

A well-known Roman mosaic related to the theme of animal shipment is a fragmentary pavement discovered in Veii depicting an elephant on the ramp of a transport ship (Fig. 37). The mosaic in question appears to have been situated in the *oecus* of a sizeable house built sometime in the second century AD.<sup>105</sup> The mosaic

itself, however, has been dated by Baratte on stylistic grounds to the end of the third or beginning of the fourth century AD (roughly contemporary with the 'Great Hunt' mosaic from Piazza Armerina).<sup>106</sup> Apart from the elephant section of the pavement, located on its northern edge, the other fragments of the mosaic are unfortunately too small to reconstruct what was originally depicted in its central section, although one of these depicts the partial figures of a horse, goat, and pig(?).<sup>107</sup>

The best-preserved section of the mosaic depicts, according to Baratte, the embarkment of an elephant onto a ship. The elephant is situated on the landward end of the ramp leading up to the ship, towards which he is facing. Judging by its large ears, humped back, and flat forehead, the animal in question is evidently an African rather than an Indian beast. Behind the elephant, a group of four men, clad in variously-coloured tunics and leggings, pull on the animal by means of two cables attached to its feet. An identical number of men on board the ship, wearing similar attire, hold onto two further cables which appear to be attached to the elephant's front feet. Behind them a fifth individual, holding what may be further cables, appears to be supervising the operation.<sup>108</sup>

Although certain aspects of the ship's depiction appear fanciful or inaccurate, such as the bird's head prow curved back towards the vessel, the craft most closely resembles a *hippago* transport, also depicted on the Althiburos ship mosaic. The relatively large size of the quarter-deck at the back of the Veii ship indicates, if it is not merely artistic elaboration on the part of the mosaicist, a later date for this vessel, since such a design is characteristic of the later empire. The 'braided' decoration on the side of the boat is commonly found on ships depicted in other Roman mosaics, particularly those from North Africa, which again suggests the elephant's African origin.<sup>109</sup>

Although Baratte understandably assumes that the elephant is being loaded onto the ship, since it is facing the boat, there is some reason to suggest that the animal in fact is being unloaded at its destination. According to Pliny, elephants

upon disembarking could be backed down the gang-plank, as at Puteoli, so as not to see how wide a gulf they had to cross.<sup>110</sup> Of the two groups of men pulling on the elephant, the one on shore appears to be pulling the hardest. All four men on shore are leaning backwards at a somewhat precarious angle, as if straining against the reluctant elephant, while their counterparts on the boat, judging by their posture, do not appear to be putting nearly as much effort into the task at hand. In addition, the cables leading from the boat to the elephant do not seem to be especially taut, while those held by the group on shore are: the lead man has evidently also looped one of the cables around his arm for extra pulling-power. The somewhat splayed stance of the elephant may also be explained by its being pulled backwards down the ramp.

If, on the other hand, one assumes that the elephant is being loaded onto the boat, the mere presence of the group of men on the shore is difficult to explain. If, as seems likely, the animals were reluctant to board the ship, there would be no need for men restraining the elephant from behind: in such a case, all eight men in the mosaic pulling the elephant from the boat would seemingly be a more sensible arrangement. Given this argument, one could certainly question the need for any men on the boat if the elephant were being unloaded, but since the animal would be walking backwards, unable to see where it was going, a few individuals on the boat with their cables would perhaps be necessary to help prevent it from accidentally stepping off the edge of the ramp.

The passage from Pliny describing the unloading of elephants in port indicates that animals may have routinely disembarked at Puteoli as well as Ostia. The former port was conveniently situated to supply the *spectacula* in Campanian cities like Naples or Capua. In addition, a good road linked Puteoli and Rome, which meant that animals could be transported overland between the two cities if the ships transporting them did not want to travel up the Italian coast as far as Ostia.<sup>111</sup>

Despite the fact that maritime transport was preferred by the Romans, in some cases animals would have to be transported overland for much of their journey. To

judge from a passage of Claudian describing the preparations for one of Stilicho's *venationes*, ox-carts, as well as transport ships, carried a large proportion of the animals necessary for any large animal-*spectacula* in Rome.<sup>112</sup> Although overland transport was more expensive and time-consuming than its seaborne equivalent, one advantage of the former was that the animals could be foraged for en route to their destination. Moreover, sufficiently tame animals could simply travel on foot with the caravan, without having to be supplied with travelling-cages for the trip.<sup>113</sup>

Any animals shipped between the Roman empire and the Far East were likely included in the caravans travelling between the two regions. Five to ten Chinese caravans per year began travelling west as far as Mesopotamia in the late second century BC, carrying a wide variety of commodities including silk, cinnamon, and even rhubarb.<sup>114</sup> Furs and hides, possibly taken from such animals as sables and snow-leopards, also formed an important component of this trade, testified to by both Pliny and the author of the *Periplus Maris Erythraei*. According to these sources, the furs came from the land of the Seres, who were apparently not the Chinese themselves but their western neighbours at the eastern terminus of the caravan route from Mesopotamia.<sup>115</sup> Florus records a group of Seres arriving at the court of Augustus bearing gifts such as pearls and elephants.<sup>116</sup> The merchants in question are said to have claimed that their journey had taken four years (...*quadriennium inpleverant*...), although this period of time is too long for them to have marched directly to Rome from their homeland. The gifts of elephants and pearls reinforce the impression that they must have spent some time in India or Mesopotamia on their way to the Mediterranean, since neither of these products seems to have been native to their starting point in Central Asia.

The Romans did not merely import animals and other commodities from the Far East. A Chinese record of imports from the Mediterranean, written in approximately 400, but based on a list compiled in the third century, records numerous animals and animal products, including tortoiseshell, white horses and black bears.<sup>117</sup> Although,

as Ferguson notes, many of the products in this list might actually have been supplied by middlemen in the trade between Rome and China, the black bears may well have come from such areas of the Roman empire as Germany, where the Romans are known to have been active in capturing such animals.

The foregoing evidence does not prove that the Romans regularly imported animals from the region of modern-day China, but it does raise the possibility: since they imported furs from the area, it does not seem unreasonable to assume that on occasion they may have acquired live specimens of some of the more exotic animal species for their spectacles. In addition, in return for their own native animals, such as black bears, the Romans may well have demanded Chinese animals as fair exchange.

Only scattered pieces of archaeological evidence exist for land transport of captured animals during the Roman period: a relief from the Archaeological Museum in Miletus depicts the type of cage which may have been used to transport such animals overland (Fig. 38).<sup>118</sup> The relief shows five lions in a large wheeled cart, twice as high as wide. The vertical bars of the cart are further supported by diagonal braces. Box-shaped structures, whose function is unclear, are located in a horizontal row about 2/3 of the way up the side of the cart.

Some idea of the bureaucratic problems associated with overland transport can be gleaned from an imperial edict issued by Theodosius and Honorius in 417:

Through the lamentation of the office staff of the Governor of Euphrates, We learn that those persons who by the ducal office staff are assigned to the task of transporting wild beasts remain, instead of seven or eight days, three or four months in the city of Hieropolis, contrary to the general rule of delegations, and in addition to the expenses for such a long period they also demand cages, which no custom permits to be furnished. We therefore direct that if any beasts are sent by the duke of the border to the imperial court, they shall not be retained longer than seven days within any municipality. The dukes and their office staffs shall know that if anything contrary hereto is done, they must pay five pounds of gold each to the account of the fisc.<sup>119</sup>

A great deal of information can be gleaned from this single document. The edict appears to indicate that the gathering and transportation of wild animals for

the *spectacula* was assigned to military staff under the *duces* of the various provinces in the later empire.<sup>120</sup> Presumably the officials escorting the animals were not allowed to stop and be housed in any city they wished, but only those cities selected by the imperial government that lay along prearranged routes from the frontiers to the interior of the empire. Even feeding a large number of animals for only a week would likely be prohibitively expensive for all but the wealthiest of cities, especially if such convoys of animals passed through more than once a year. Hieropolis, due to its proximity both to the upper Euphrates river and the Mediterranean, may well have been one of the primary staging posts for animals which had been shipped upriver from Mesopotamia and points further east prior to their short journey to the sea-coast: the city is known to have been a prominent way-station for other goods arriving from such regions as Scythia, India, and Persia.<sup>121</sup>

Complaints like the one in this edict were likely fairly frequent, since, although it is not directly mentioned in the decree, the civil administration of cities like Hieropolis was responsible for feeding its military colleagues and their animals during their stay in the area.<sup>122</sup> A four-month 'visit' by such officials would certainly be a valid cause for complaint in such a case. The large fine exacted for staying longer than seven days in a particular city also indicates that this offense was not uncommon, and one which the imperial government felt it had to crack down on if it wanted to ensure a steady supply of animals for the *spectacula* in Rome and elsewhere.

Unfortunately this edict does not shed any light on how these convoys of animals were kept segregated from the populace during their stay in cities like Hieropolis, although they may have been kept in animal enclosures like that in Rome. Horace states that bears at least were kept in cages in Rome for upcoming *venationes* in the city.<sup>123</sup> The edict makes it clear that municipal officials in the cities did not have to supply cages for the animals, but it does not specify whether the

military personnel escorting the animals were normally expected to provide and use cages for them in the cities.

Tertullian and other authors suggest that wild animals in the cities often escaped their cages and attacked residents, but this claim does not appear to be specifically substantiated by other literary evidence, which is virtually silent on the subject.<sup>124</sup> One exception is the incident in Rome recorded by Pliny, when the sculptor Pasiteles visited the animal cages beside the Tiber, pens which had presumably been shipped upriver from Ostia, awaiting overland transport to enclosures or amphitheatres in the area. While examining a lion through the bars of its cage, Pasiteles was almost killed by a leopard escaping at that moment from a neighboring pen.<sup>125</sup> That said, the fact that Pasiteles was allowed to approach the cages in the first place implies that such accidents were a rarity. Although not mentioned by the sources, troops may have been stationed at the docks in Rome when animals for the *spectacula* arrived in order to protect innocent civilians like Pasiteles from any potential danger. The only other mention of an 'animal outbreak' dates from some 500 years later, when in the 23rd year of Justinian's reign, some elephants are recorded as having escaped from their stables at night in Constantinople, killing and injuring many residents.<sup>126</sup>

The Romans took legal measures both to profit from the trade in animals and to protect their citizens from potential mishaps as a result of this trade. At an undetermined date, custom-duties began to be imposed on the import and movement of lions and "leopard class" animals within the empire: by the late fourth century bears were also included in the list of taxable animals. Judging from one of Symmachus' letters, quaestors and other Roman magistrates responsible for staging official games were not subjected to this tax.<sup>127</sup> Evidently one way the Roman emperors raised money for their own lavish *spectacula* was by taxing private individuals importing animals for smaller animal events throughout the empire. Since the extant literary records indicate that lions and, in particular, leopards

played a prominent role in Republican spectacles, the tax on the importation of these animals may have been instituted even before the reign of Augustus.

Further Roman legislation related to the trade in animals practiced by some private citizens. According to the jurist Paul, wild animals were forbidden to be kept together on a public thoroughfare, and their owner was subject to prosecution if anyone were harmed by these animals.<sup>128</sup> According to Ulpian, the aediles in Rome forbade the possession of dogs(?), wild boars, bears, wolves, lions, or leopards. The fine for the death of a free man caused by such animals was 200 *solidi*, while in the case of damaged property, a fine of double its value was exacted from the guilty party, who was presumably considered to be the animal's keeper or trainer. An escaped wild animal was legally considered to be without an owner, so that although no one was liable for damage caused by the animal, anyone could in turn kill the animal and keep its body with impunity.<sup>129</sup>

Although, as we have seen, the Romans obviously went to great pains to ensure an adequate supply of animals for spectacles throughout the empire, such arrangements could easily be thwarted by the uncertainties of weather or the difficulty of keeping some species of animals alive for long periods of time in captivity. The attempts of Pliny the Younger's friend Maximus to procure *Africanæ* (lions?) for his games in Verona were evidently foiled by contrary winds on the Mediterranean, although to judge from the text of the letter it does not appear that any of the animals actually perished en route.<sup>130</sup> In the late second or early third century, the demarch Gaius Herbacius Romanus distributed 5000 *nummi* apiece to the phratries of Naples, instead of his *promissam venationem*: although the relevant inscription does not explain this change in plans, it is more than likely that Romanus had animal-supply problems similar to those experienced by Maximus.<sup>131</sup>

At a much later date, Symmachus had similar animal-related problems. The transport of the bears he requisitioned for the quaestorian games of 393 was delayed for some time, and the animals which did finally arrive were in poor condition.<sup>132</sup>



Symmachus had an even worse time attempting to obtain racing-horses from Spain for the praetorian games of 401: of sixteen such horses sent to Symmachus from one of his friends abroad, five died en route to Rome, while a number of the survivors later perished in Rome before the games began.<sup>133</sup> Since horses are amongst the easiest of animals to raise in captivity, the latter group may have perished as a result of after-effects of the voyage from Spain, rather than of the care they received in Rome. Symmachus also records similar problems with far more exotic animals kept in Rome, but these problems were more likely caused by problems keeping such animals alive in captivity. Several crocodiles obtained by Symmachus lasted long enough to participate in the praetorian games, but then refused to eat for fifty days, reducing the animals to such a state that Symmachus felt obliged to destroy all but two of them rather than keep them alive for some of his friends to see, as had been his original intention.<sup>134</sup> Symmachus was also forced to ask for imperial permission to buy a second group of *Libycae ferae* for the same spectacle. Although he does not specify what happened to the original group of animals, it appears likely that they suffered a fate similar to the horses and/or crocodiles listed above.<sup>135</sup>

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Notes:

<sup>1</sup> Friedländer (1968) Vol. 2; 65: Pearson (1973) 120-22: Weeber (1994) 28-29. Other exotic animals, of course, were brought to Europe in the period between the fall of the Roman empire and the modern era. In 1513 King Manuel of Portugal, for example, obtained a rhinoceros for the pope that unfortunately died on the voyage between Lisbon and Italy. This animal was the inspiration for Dürer's famous rhinoceros woodcut produced in 1515: see Dinzelbacher (2000) 358-59.

<sup>2</sup> Timothy of Gaza 9: Marrou (1978) 281-84.

<sup>3</sup> Marrou (1978) 284-85.

<sup>4</sup> Merten (1991) 144-45.

<sup>5</sup> Manganaro (1982) 498: Settis (1975) 919-20, 946-47, 950-52.

<sup>6</sup> Settis (1982) 531-32.

<sup>7</sup> Settis (1975) 947: for the dating of the mosaic see Settis (1982) 519-21.

<sup>8</sup> Pliny, *NH*, 8, 20: Florus 2, 34: Sallust, *Bell. Jug.* 21, 2; 26, 1: Dio 54, 9, 8.

<sup>9</sup> To my knowledge there is no evidence as to whether or not client kings ever allowed Roman hunters into their territories, but this may have been another method by which they 'indirectly' supplied Rome with various exotic animals.

<sup>10</sup> *Paneg.* 2(10), 10, 7: 12(2), 22: Eusebius, *Vita Constantini*, 4, 50.: *MGH, Chronica Minora*, 2, 83: Merten (1991) 142-42: Burstein (1992) 55-56: Jennison (1937) 66-67: Scullard (1974) 205: Demandt (1989) 327:

<sup>11</sup> MGH, *Chronica Minora*, 2, 161.

<sup>12</sup> Volbach (1976) 47-48, n.48.

<sup>13</sup> SHA, *Severus Alexander*, 56, 3. SHA, *Gordiani Tres*, 33, 1. The thirty elephants originally said to have been captured by Severus Alexander did not all suffer the same fate, perhaps reflecting the uncertainties of animal transport and maintenance in the Roman period. Twelve of the elephants evidently died en route from Persia to Rome, whether from disease, starvation, or natural causes. Since the Romans at the time did not employ elephants in their own army, the emperor would have had no reason to leave any of the thirty captured elephants with his troops, but would most likely have sent them all on to Rome. As Merten [(1991) 147] suggests, the eight elephants which perished in Rome between the reigns of Severus Alexander and Gordian III may have been killed as part of various *venationes* staged in the interval between their arrival in Rome and the reign of the latter emperor. Alternatively, these elephants might have simply died of natural causes or disease in one of the imperial animal-enclosures.

<sup>14</sup> SHA, *Gordiani Tres*, 33, 1: Merten (1991) 147. Since only twenty-two of the thirty-two elephants said to have been in Rome during Gordian III's reign were obtained through the efforts of Gordian and his predecessor Severus Alexander, it is possible that the remaining ten were bred by the Romans themselves, perhaps in the elephant-enclosure known to have existed at nearby Laurentum.

<sup>15</sup> Christol (1988) 323-24; Thouvenot (1950) 283-87. The term *caelestia* in this text is taken to mean 'divine', and because of the divine associations both elephants and lions enjoyed in antiquity (discussed in the individual sections on each animal below), the animals in the Banasa inscription are thought to be one of these two species.

<sup>16</sup> Christol (1988) 324-29.

<sup>17</sup> Jennison (1937) 62.

<sup>18</sup> Petronius, *Satyricon*, 119, 14-18: Kyle (1998) 77-78.

<sup>19</sup> Casson (1994) 283-84.

<sup>20</sup> Statius, *Silvae*, 2, 5: Jennison (1937) 80-81.

<sup>21</sup> Robert (1971) 81, n. 15; 313. As Robert states, the local animals participating in this spectacle may well have included such varieties as wild boars and bears.

<sup>22</sup> Robert (1971) 159-60, n. 133; 313.

<sup>23</sup> Robert (1949) 128-31, n. 322.

<sup>24</sup> Robert (1948) 90.

<sup>25</sup> Robert (1971) 221, n. 272.

<sup>26</sup> Robert (1971) 142, n. 98.

<sup>27</sup> Robert (1971) 195-96, n. 198-200.

<sup>28</sup> Robert (1971) 314.

<sup>29</sup> Robert (1971) 314, n. 1. In any case, priests of the imperial cult staging *spectacula* may have been exempt from such restrictions.

<sup>30</sup> For this use of the adjective 'Libyan' see e.g. Symmachus, *Epistulae*, 2, 76.

<sup>31</sup> CT 15, 11, 2.

<sup>32</sup> Such a 'deception' would of course depend upon the audience not recognizing the difference between African and Asiatic lions.

<sup>33</sup> Apuleius, *Metamorphoses*, 10, 18-19.

<sup>34</sup> Julian, *Epistulae*, 35. As Robert states, the date of this particular letter is controversial. It appears to date to the end of the first century, since the family of one of the individuals mentioned in it is known from inscriptions of that era found in Argos and Epidauros: see Robert (1942) 149.

<sup>35</sup> Libanius, *Epistulae*, 217-19: Robert (1971) 313, n. 3.

<sup>36</sup> Fora (1996b) 45.

<sup>37</sup> Jennison (1937) 166-67.

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- <sup>38</sup> Jennison (1937) 166-68.
- <sup>39</sup> Jennison (1937) 168.
- <sup>40</sup> Jennison (1937) 166. Jennison states that leopards were commonplace performers in *venationes* throughout the empire, but apart from noting that a small number of such animals are known to have appeared at Pompeii, fails to provide much literary or artistic evidence for such a blanket statement.
- <sup>41</sup> Robert (1971) 118, n. 63; 312-13.
- <sup>42</sup> Robert (1971) 195, n. 198; 313.
- <sup>43</sup> Robert (1971) 206-07, n. 234; 218, n. 265.
- <sup>44</sup> Robert (1971) 161-62, n. 138.
- <sup>45</sup> Robert (1971) 206, n. 233.
- <sup>46</sup> Robert (1971) 314.
- <sup>47</sup> Bertrand (1987) 222.
- <sup>48</sup> Oppian, *Cynegetica*, 4, 43-45.
- <sup>49</sup> Claudian, *De Consulatu Stilichonis*, 3, 272-73: Jennison (1937) 144.
- <sup>50</sup> Jennison (1937) 9, 145. As Jennison notes, the Boers of south Africa are known to have drowned herds of animals by driving them into rivers, using a similar technique to that employed in the mosaic (although of course with a different end result!).
- <sup>51</sup> Dunbabin (1978) 48.
- <sup>52</sup> Xenophon, *Cynegetica*, 9, 11-20: Grattius 89-94: Jennison (1937) 146.
- <sup>53</sup> Arrian, *Cynegetica*, 24, 3-4: Jennison (1937) 145-46: Dunbabin (1978) 55.
- <sup>54</sup> Other authors who mention this device in passing include Seneca, *Dialogi*, 4, 11, 5; *Hippolytus*, 46-48: Virgil, *Georgics*, 3, 372: Lucan 4, 437-38.
- <sup>55</sup> Grattius 75-88: Anderson (1985) 94.
- <sup>56</sup> Nemesianus, *Cynegetica*, 303-20: Anderson (1985) 141.
- <sup>57</sup> Claudian, *De Consulatu Stilichonis*, 3, 323, 325: Another common word for such structures was *claustra*, although this phrase on occasion may have referred to the simple wooden cages the animals were initially captured in, rather than the more elaborate ones they were transported in: see Jennison (1937) 148-49.
- <sup>58</sup> Livy 42, 59: Lucan 10, 445-46: Jennison (1937) 148-49.
- <sup>59</sup> Bertrand (1987) 214-15: Dunbabin (1978) 53-54.
- <sup>60</sup> Bertrand (1987) 216.
- <sup>61</sup> Bertrand (1987) 216.
- <sup>62</sup> Bertrand (1987) 217.
- <sup>63</sup> Claudian, *De Raptu Proserpinae*, 3, 36, 267: Bertrand (1987) 216-17: Messineo (2000) 64, fig. 65.
- <sup>64</sup> Daltrop (1969) 26: Toynbee (1996) 27-28.
- <sup>65</sup> Bertrand (1987) 217.
- <sup>66</sup> Bertrand (1987) 217-18.
- <sup>67</sup> Bertrand (1987) 218-19.
- <sup>68</sup> Bertrand (1987) 219.
- <sup>69</sup> Symmachus, *Epistulae*, 2, 77: Jennison (1937) 148-49.
- <sup>70</sup> Jennison (1937) 149-50.
- <sup>71</sup> Apuleius, *Metamorphoses*, 4, 14: Symmachus, *Epistulae*, 2, 76.
- <sup>72</sup> Jennison (1937) 149.
- <sup>73</sup> Malalas 12, 4.
- <sup>74</sup> Symmachus, *Epistulae*, 6, 35: Jennison (1937) 95.
- <sup>75</sup> Bertrand (1987) 218-20.
- <sup>76</sup> Toynbee (1996) 28-29.
- <sup>77</sup> Bertrand (1987) 223.
- <sup>78</sup> Charlesworth (1974) 23, 44. One must also remember that the Romans avoided sailing altogether during the winter months, which would also delay the shipment of animals as well as other goods.

- <sup>79</sup> Bertrandy (1987) 226: For an example of mishaps caused by storms see e.g. Symmachus, *Epistulae*, 2, 76, 2.
- <sup>80</sup> Pliny, *Epistulae*, 6, 34: Symmachus, *Epistulae*, 2; 46, 76, 77: 4; 7, 8, 12, 58-60, 63: 5; 56, 62, 82: 6; 33, 35, 43: 7; 48, 59, 82, 98, 105, 106, 121, 122: 9; 15, 16, 20, 27, 117, 135, 141, 144, 151: Toynbee (1996) 20-21.
- <sup>81</sup> Strabo, 17, 1: Krebs (1965) 87.
- <sup>82</sup> Pliny, *NH*, 8, 25: Orth (1914) 603.
- <sup>83</sup> Pliny, *NH*, 8, 11.
- <sup>84</sup> Strabo 16, 4, 5; 16, 16: Diodorus Siculus 3, 26, 27, 36: Toynbee (1996) 33: Krebs (1965) 97-98: Jennison (1937) 37, 40: For a more detailed exposition of the Ptolemaic elephant-gathering arrangements, see Scullard (1974) 126-37.
- <sup>85</sup> Krebs (1965) 99-101. In terms of sheer numbers, the effectiveness of the Ptolemaic arrangement may be judged by the fact they gathered a force of approximately 400 war-elephants in the thirty years between 280 and 250 BC. Those obtained by the Ptolemaic hunters, however, were of necessity immature specimens rather than full-grown adults. Captured animals would have to be broken in before they could be safely transported on ships, a process that would evidently prove fatal to adult elephants. In addition, a large number of those elephants who survived the trip to Alexandria would likely die relatively soon in captivity, so that hunts for such animals would have to be undertaken on a yearly basis to ensure an adequate supply in Alexandria. The purpose of an embassy sent from Ptolemy II to India may well have been to acquire some Indian mahouts experienced in elephant-handling in order to cut down on the number of Ptolemaic elephants dying in captivity: see Pliny, *NH*, 6, 17, 58: Jennison (1937) 38-39.
- <sup>86</sup> Krebs (1965) 87.
- <sup>87</sup> Krebs (1965) 96-97.
- <sup>88</sup> Bertrandy (1987) 223-25. A *hippago*, complete with its cargo of horses, is depicted on a third century mosaic from Althiburos: see Bertrandy (1987), fig. 13.
- <sup>89</sup> Bertrandy (1987) 224-25.
- <sup>90</sup> *CAH* 10, 626: Luni (1979) 56-57: For the extent of trade passing through Cyrene, see Luni (1979) 62-65.
- <sup>91</sup> Luni (1979) 52-53.
- <sup>92</sup> Luni (1979) 56.
- <sup>93</sup> Luni (1979) 57-58. A series of large cisterns built into the southwestern corner of the enclosure postdates the earthquake of 365 A.D.: see Luni (1979) 59-62.
- <sup>94</sup> Luni (1979) 62.
- <sup>95</sup> Bertrandy (1987) 227.
- <sup>96</sup> Frank (1959) Vol. 5; 292-93; Vol. 4; 62, 105.
- <sup>97</sup> Frank (1959) Vol. 4; 111.
- <sup>98</sup> Bertrandy (1987) 228: Toynbee (1996) 52-53: Becatti (1953) 76-77, n. 109.
- <sup>99</sup> De Salvo (1989) 751-52: Bertrandy (1987) 229-30: For *navicularii* in Africa see e.g. CIL 8, 915; 969; 970; 21757.
- <sup>100</sup> Bertrandy (1987) 229.
- <sup>101</sup> *AE* 1951, 135: De Salvo (1989) 751-52.
- <sup>102</sup> Ammianus Marcellinus, 29, 3, 5: *CI* 8, 5, 1, 16: *Exp. tot. mun.* 66: De Salvo (1989) 744-45, 748: For Sardinian merchants in Ostia see CIL 14, 4549, 19; 21.
- <sup>103</sup> De Salvo (1989) 743, 750-51. This individual may have been employed by the prominent grain-shipping family of the Aufidii, who are known from other inscriptions to have been heavily involved in the *annona* trade in Africa.
- <sup>104</sup> Bertrandy (1987) 213-14: Pliny, for instance, states [*NH*, 8, 15] that he does not intend to discuss in detail the various animals imported to Italy by the Romans.
- <sup>105</sup> Baratte (1970): 787-90.
- <sup>106</sup> Baratte (1970) 806.

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- <sup>107</sup> Baratte (1970) 791, 794, 796.  
<sup>108</sup> Baratte (1970) 796-99.  
<sup>109</sup> Baratte (1970) 799-802.  
<sup>110</sup> Pliny, *NH*, 8, 3: Bertrand (1987) 220-21.  
<sup>111</sup> Bertrand (1987) 228.  
<sup>112</sup> Claudian, *De Consulatu Stilichonis*, 3, 325-32.  
<sup>113</sup> Jennison (1937) 149. Animals like deer, for example, could presumably be tied-off to wagons in the caravan without the need to be individually caged for the journey.  
<sup>114</sup> Ferguson (1978): 586-89: Jennison (1937) 149.  
<sup>115</sup> Pliny, *NH*, 34, 41; 37, 78: *Periplus Mar. Erythr.* 39: Ferguson (1978) 585, 589.  
<sup>116</sup> Florus 2, 34, 62: Ferguson (1978) 592-93.  
<sup>117</sup> Ferguson (1978) 591.  
<sup>118</sup> Monteagudo (1991) 260.  
<sup>119</sup> *CT* 15, 11, 2: Pharr (1969) 436.  
<sup>120</sup> Jennison (1937) 141: Bomgardner (2000) 213.  
<sup>121</sup> Jennison (1937) 152: Liebeschuetz (1972) 77: Petit (1955) 304.  
<sup>122</sup> Jennison (1937) 152.  
<sup>123</sup> Horace, *Epistulae*, 2, 1, 186; 2, 3, 472. Orth (1914) 600.  
<sup>124</sup> Tertullian, *Ad Martyres*, 5: Scobie (1988) 203.  
<sup>125</sup> Pliny, *NH*, 36, 4: Toynbee (1996) 65.  
<sup>126</sup> Paul. Diac., *Historia Miscella*, 16: Jennison (1937) 174.  
<sup>127</sup> *Digest*, 39, 4, 16, 7: Symmachus, *Epistulae*, 5, 62: Jennison (1937) 153. As Lanata [(1998) 53] points out, this is the only Roman law concerned directly with the importation of animals, which is rather surprising considering the number of wild animals that must have arrived in Rome every year for the spectacles. One possible reason for this apparent anomaly is that, under Roman law, the owners of wild animals were not legally liable for the damage caused by their escaped charges: see Lee (1946) 398.  
<sup>128</sup> *Pauli Sententiae*, 1, 15: Robinson (1997) 47: Robinson (1994) 207.  
<sup>129</sup> *Digest*, 21, 1, 40-2; 9, 1, 1-10: Jennison (1937) 153: Loisel (1912) 101-02.  
<sup>130</sup> Pliny, *Epistulae*, 6, 34.  
<sup>131</sup> ILS 6456: Fora (1996b) 51, 136, n. 113.  
<sup>132</sup> Symmachus, *Epistulae*, 2, 76.  
<sup>133</sup> Symmachus, *Epistulae*, 5, 56.  
<sup>134</sup> Symmachus, *Epistulae*, 6, 43. Interestingly enough, Symmachus' crocodiles may not have been as sick as he assumed. In the wild, crocodiles normally eat only a few times per year, regularly going for more than 50 days at a time without food: private communication, Grant Hopcraft, Dept. of Zoology, U.B.C. In any case, however, the destruction of these animals, sick or not, was ultimately due to Roman ignorance of their 'dietary requirements'.  
<sup>135</sup> Symmachus, *Epistulae*, 7, 122.

### Supply Personnel for Animal Spectacula

It is not surprising that many individuals throughout the empire were active in supplying animals required for various *venationes* and displays, given the large number of beasts required for these events. Soldiers posted in areas where wildlife was relatively abundant formed a ready labour force to help ensure a supply of animals for any upcoming *spectacula*. The Roman military, however, was not the only group involved in animal-supply: a number of civilians evidently made money by capturing and shipping beasts to various events.

#### *Civilian Hunting and Animal-Capture:*

One of the most notable pieces of evidence for civilian involvement in animal-capture is the 'Great Hunt' mosaic from Piazza Armerina, a work depicting the gathering of beasts from throughout the known world. Although, as will be discussed below, the most important individuals in the scene, including the official in charge of the hunt, seem to be members of the Roman military, civilian assistants are by no means absent. The men not clad in military costume presumably represent the private hunters and merchants, such as the *ursorum negociatores* mentioned by Symmachus, also involved in the animal trade.<sup>1</sup>

Further evidence for a civilian connection with the widespread animal-capture depicted in Piazza Armerina comes from the peristyle court providing access to the 'Great Hunt' corridor. Flanking the columns of this court on all four sides are numerous mosaic roundels which depict exotic animals including wild boars, antelopes, elephants, ostriches, lions, and bulls.<sup>2</sup> The small 'Bonifatius' mosaic in front of the steps connecting the corridor and court, depicting millet-stalks and numbers indicative of African *venatio* corporations like the *Telegenii*, suggests that

civilian members of these groups were involved in the capture of the animals depicted in the nearby roundels.<sup>3</sup>

The hunting and capture of various animals was evidently an important activity for civilians in Rome's African provinces. In Egypt, government-appointed δημόσιοι κυνηγοί controlled lucrative hunting-rights, and granted them to various individuals in return for a percentage of their catch.<sup>4</sup> Hunting mosaics produced in the rest of North Africa, including those depicting the capture of wild animals used in animal *spectacula*, also illustrate the importance of this pastime in the region and may in certain cases reflect the activities of the mosaic-patrons themselves.<sup>5</sup> A mosaic from the Maison de Bacchus in Djemila is a good example. The upper half of the mosaic depicts the patron of the mosaic in front of his villa, while its lower half shows various amphitheatre scenes, likely from a spectacle staged by this individual. The hunter with a net depicted in the mosaic, if not merely employed in hunting hares such as the one he holds in his right hand, may have been active in capturing animals on behalf of his patron for spectacles such as those seen in the mosaic.<sup>6</sup>

Individuals in the northwestern provinces were also active in the animal-trade. A large cinerary container from Salzburg later reused as a sarcophagus bears the inscription *Profuturo vestigiatori Lol(lii) Honorati ob(ito) ann(or)um XXX Barbius [...et....Ve]rina pa[rentes et....] con(iux) vivi pos(uerunt)*. The lettering on the inscription dates it to shortly after 200 AD.<sup>7</sup> According to Varro, *vestigatores* were trackers of wild animals (*vestigator a vestigiis ferarum quas indigatur*).<sup>8</sup> Although Columella uses the same term to refer to men who search for bee-swarms, it is probable that the majority of inscriptions found in the northern Roman provinces which mention *vestigatores* refer to animal rather than insect trackers. The *vestigator* in this particular inscription was evidently not a member of the military, although one of his relatives, another Barbius from Salzburg (*Iuvavum*) is known to have been a veteran of *legio XV Apollinaris*.<sup>9</sup>

A second funerary inscription found near Salzburg dates to the same period as the epitaph just discussed, and appears to commemorate an individual who may well have closely worked with Profuturus during his lifetime. The inscription in question reads: *D(is) M(anibus) Placidus Tinc() Lol(lii) Honora(ti) ser(vus) v(ivus) f(ecit) sibi et Firm(a)e coniu(gi) et Placidiano fil(io) et suisque omnib(us)*.<sup>10</sup> The main point of difficulty with this inscription lies in the restoration of the word *Tinc()*. Some scholars have taken this to be a cognomen such as *Tincius*, which is attested in other Norican inscriptions: others have restored the word in question as *tinctor*, thereby indicating Placidus' profession as dyer.<sup>11</sup> Egger, however, believes the term *tinctor* is merely a bowdlerization of the term *cinctor*, meaning the individual who either set snares within the forest or ringed small forest-glades with nets to trap the animals within: the latter practice is briefly attested to by Virgil, Pliny, and Seneca. The changing of the initial letter of *cinctor* from "c" to "t" is consistent with other known cases of such linguistic alterations in later provincial Latin: for example, the town of Cincontium in Gallia Aquitania is listed as Tincontium in the Antonine Itinerary.<sup>12</sup>

The restoration of *tinc()* as *cinctor* would accord well with the hunting occupation of Profuturus, another employee of Lollius Honoratus, as well as the reliefs of swans flapping their wings on either side of Placidus' tombstone.<sup>13</sup> The swan reliefs in particular suggest that Placidus may have been specifically involved in catching water-fowl, such as the geese which Roman troops are known to have hunted in Lower Germany.<sup>14</sup> Taken together, the two inscriptions just discussed indicate that the slaves and employees of Lollius Honoratus were involved in rounding up various game in and around ancient Iuvavum for their customers.<sup>15</sup>

A prominent family from the area of modern-day Klagenfurt (*Virunum*), the Albii, was also involved in capturing animals for the games.<sup>16</sup> A relief panel found in Radstadt (*Teurnia*) near Salzburg bears the inscription *Syrasc(us) Valerian(us) Eutyches Alb(ii) Ma[x(imi) sc. servi]*. The relief depicts three bear-hunters, armed with whips and shields, sacrificing at an altar labelled *Nemesi Aug(ustae)*: to the



right Diana, armed with bow and quiver, observes the scene.<sup>17</sup> The fact that the hunters are armed with whips rather than swords or spears suggests that their intention is to capture bears rather than slay them. The depiction of huntsmen sacrificing at an altar is similar to that on the 'Small Hunt' mosaic from Piazza Armerina. The altar in the relief suggests that the depicted events are occurring in the wild rather than in the arena, although Egger maintains that Albius' slaves may have fought in the *venationes* as well.<sup>18</sup>

A mithraeum found in Salzburg contains two identical early third century inscriptions dedicated to the health of a certain Lucius Albius Atticus by the legate Pollienus Sebennus, who is known to have been governor of Noricum in 206.<sup>19</sup> Several relief carvings are flanked by the two inscriptions, of which the central scene depicts a tree, with a lion to the right and a dog pursuing a doe to the left. To the right of this scene a mounted huntsman springs after the lion, while a female hunter on horseback follows the dog on the left side of the relief. Neither rider appears to be carrying any visible weapon, although they may in fact be carrying less visible objects like torches and lassos, which were often used for hunting such animals as deer (Fig. 39).<sup>20</sup> The apparent lack of offensive weapons, as well as the tree placed in the centre of the composition, may also be meant to signify that the scene represented is one of capturing animals in the wild rather than a *venatio* in the arena.<sup>21</sup>

The theme of the reliefs, as well as the corresponding inscriptions, suggest that Albius Atticus and his slaves were involved in much the same business as his relative Albius Maximus, that is, capturing animals for the games. If Albius Atticus supplied the animals for a *spectaculum* staged in Noricum by the governor Pollienus, it would help explain why the latter curiously had two of his soldiers set up a dedicatory inscription to the former, a private citizen, in the Salzburg mithraeum.<sup>22</sup> The reliefs relating to Albius' occupation, rather than the deeds of Mithras, may have been commissioned and paid for by the wealthy Albii, who possibly funded the

restoration of the mithraeum in the early third century.<sup>23</sup> The female hunter in the relief may in fact be intended to represent Diana, who of course would be responsible for ensuring the success of any hunts undertaken by Albius' men.<sup>24</sup>

The lion may have been included in the relief in order to add an 'exotic' element to the scene, or it may well be that the wealthy Albii possessed business contacts from as far afield as Asia Minor or Africa, who could supply them with lions and other non-indigenous animals for *spectacula* in Noricum and elsewhere. According to Egger, such a lion, if brought to Noricum, would have been a tame specimen intended only for display, but there seems no real reason to assume that such animal could not also have appeared in arena *venationes*.<sup>25</sup> The presence of lions in Noricum is further suggested by a Roman graffito found on the Magdalensburg, which depicts a lion and *venator*.<sup>26</sup>

Another private individual who may have been connected with capturing animals for various *spectacula* is recorded in a funerary inscription of approximately AD 100 originally located in the territory of the Lingones, near the headwaters of the Marne and Seine rivers in central France.<sup>27</sup> The Sextus Julius Aquilinus(?) commemorated by this inscription may well have been distantly related to the prominent official and famous writer on aqueducts, Sextus Julius Frontinus, who appears to have come from this region.<sup>28</sup> Whatever the deceased's exact identity, he appears to have made a great deal of money as indicated by his extravagant grave monument of Luna marble, perhaps by his hunting and fowling pursuits. The monument is now lost, but we can reconstruct it from the instructions left for it in the inscription. It contained at least a five-foot tall seated statue of the deceased in marble or bronze, as well as marble couches and benches. The attachment of Sextus to his hunting pursuits in particular is indicated by his wish to have his chairs(?) made of elk horns to be cremated along with him.<sup>29</sup>

For our purposes, the most interesting section of this inscription comes at its conclusion, where he gives instructions for the disposal of his hunting-equipment:

...I desire all the equipment which I acquired for hunting and fowling to be cremated with me including lances, swords, hunting knives, nets, snares, nooses, lime twigs, tents, scarecrows [*formidines*], bathing utensils, litters, sedan chair, and all medicines and equipment of that science, and the rush-work Liburnian boat.<sup>30</sup>

The equipment in question consists of many items one would expect a hunter to own, such as *formidines*, the ropes strung with feathers used by hunters to frighten game.<sup>31</sup> The more notable items in this list slated for destruction consist of Sextus' hunting-related medicine, equipment, and Liburnian boat [*omne medicamentum [et] instrumentum illius studi [hunting] et navem liburnam e[x] sc[i]r[p]o*].<sup>32</sup> Since it is possible from some of the previously-mentioned items, such as nooses and nets, that at least some of the animals hunted by the deceased or his employees were to be captured alive, it may be that the medicine or drugs mentioned in the inscription were as much intended to keep some of the injured animals alive as to heal wounded hunters. The supposition that the deceased was involved in the transport of live animals to various destinations is strengthened by the mention of the *navis liburna ex scirpo* in the inscription, evidently a small boat constructed out of reeds or bullrushes, such as are known to have existed in Egypt.<sup>33</sup>

The vessel usually denoted by the term "Liburnian" in the ancient sources was a two-banked war galley used in the Roman navy, derived from a craft used by the Liburni, a group of Illyrian pirates, at least as early as the third century BC. This ship was also known by the name *lembos*.<sup>34</sup> Such a vessel, however, is far too large to be that possessed by Sextus. A possible solution is indicated by an alternate meaning for the word *lembos*: since it could also be used to refer to a small skiff or riverboat, the related term *liburna* may well have had the same meaning on occasion.<sup>35</sup> The *liburna*, which, according to Tacitus, was imported by the Suebi from Egypt, was indeed likely a skiff rather than a galley.<sup>36</sup> An inland German tribe would be most likely to use some sort of riverboat as an emblem for one of their goddesses, rather than a Roman warship with which they are unlikely to have been familiar. Why the particular boat in the inscription was built out of reeds rather than wood is

something of a mystery, unless the latter material was in relatively short supply in the deceased's home region.<sup>37</sup>

Sextus' area of activity appears to have been near the headwaters of the Marne and Seine rivers, which means that, using his riverboat, he could easily ship captured animals downriver as far as the English Channel. In addition, the headwaters of the Saone river, a tributary of the Rhone, are also not too far distant from where the inscription was originally erected, indicating that the deceased could also theoretically have shipped animals down to the Mediterranean as well. Like the Albii in Noricum, this individual, assuming the hunting and capture of animals was his main source of income, undoubtedly had a large body of his slaves and freedmen assisting him in this endeavour.<sup>38</sup>

#### *Military Hunting and Animal-Capture:*

Hunting, whether for the *spectacula* or for other purposes, formed a regular part of soldiers' duties on the frontiers also. One of the most important pieces of pictorial evidence for such activity is the 'Great Hunt' mosaic from Piazza Armerina, which depicts the gathering of exotic animals in the wild by a group consisting mostly of Roman soldiers. Marrou has argued convincingly that the costume worn by most of the men in the mosaic is military rather than civilian. The flat *pileus* cap worn by such individuals as the 'Maximian' figure on the right side of the mosaic, to judge from contemporary depictions of such headwear found on the Arch of Constantine and other monuments, was commonly worn by soldiers of the late Roman army when not in battle.<sup>39</sup> The *chlamydes*, boots, belts, and large oval shields borne by several figures in the mosaic are also characteristic of the late Roman military: the different colours of the shields, if not purely decorative, may indicate members of different cohorts.<sup>40</sup> Based upon this evidence, Marrou would prefer to see the

senior 'Maximian' figure in the mosaic as a military tribune supervising the gathering of animals by some of his troops.<sup>41</sup>

A bronze shield roundel discovered in Britain may also allude to the hunting of various animals by Roman troops stationed in that region (Fig. 40). The emblem, which has been tentatively dated to the third century, is inscribed with the name of the otherwise unknown Aurelius Cervianus, evidently an officer from one of the two legions shown on the device. In the upper zone of the roundel are depicted soldiers from both the 2nd Augusta and 20th Valeria Victrix legions, identified by the inscriptions and individual legionary mascots above them. For our purposes, however, the most interesting part of the scene is its lower half. In this zone are shown various animals set in the wild, to judge by the flower included in the depiction. The animals include a hare, two dogs, two peacocks, a stag, and a lion. Another indication that the animals are meant to be in a natural, rather than a *venatio* setting, is their non-violent activity: although the two dogs appear to be chasing the hare and stag, none of the beasts is in actual combat with another. Since both of the legions depicted on the roundel were stationed in Britain in the third century, the lion and peacocks in the scene show that the emblem was only meant to symbolize their hunting activities in the broadest possible terms, rather than representing an accurate 'inventory' of the animals they pursued.<sup>42</sup>

The majority of evidence for the Roman military's role in animal capture is provided by various pieces of literary and epigraphic evidence. The *Cestes* of Julius Africanus, written between AD 228 and 231, recommends the capture of wild animals by soldiers as a type of military exercise, giving detailed instructions for the capture of lions in the wild.<sup>43</sup> Vegetius, writing possibly during the reign of Theodosius I (379-95), states that boar and stag hunters make ideal recruits for the army, which may be related to the latter's role in capturing such animals for the games.<sup>44</sup> Urbicius, writing under Anastasius (491-518), also stresses the importance of hunting

as a means for soldiers to exercise both themselves and their horses, although he perhaps has the slaughter rather than the capture of wild animals in mind.<sup>45</sup>

The *Notitia Dignitatum* also suggests that a number of soldiers in the late Roman army were involved in hunting various animals. Amongst the auxiliary units recorded in Illyricum are a *numerus* of *sagittarii venatores*.<sup>46</sup> Although these archers may have normally killed game for food and other purposes, it is not implausible that they were also periodically involved in capturing animals for the spectacles, particularly in a relatively undeveloped region like Illyricum.

An inscription from the city of Montana in Moesia (present-day Bulgaria) gives some indication of how various animals were rounded up by the military for *spectacula* in Rome and elsewhere. The inscription, dedicated to the goddess Diana, dates to AD 147. Mention is made of Tiberius Claudius Ulpianus, tribune of the first Cilician cohort, as well as vexillations of the First Legion Italica, the Eleventh Legion Claudia, and the *classis Flavia Moesia*, all of whom were assigned by the governor of Moesia, Claudius Saturninus, to capture bears and bison for an imperial *venatio*. The *venatio* in question was likely that put on by Antoninus Pius in 148 to celebrate the 900th anniversary of Rome.<sup>47</sup> The fleet was presumably involved in shipping the captured animals down to the mouth of the Danube, at which point larger vessels could transport them to Italy.<sup>48</sup> Bones of both bears and bison found in the fortress at Montana suggest that the animals may have been kept at the site for some time, perhaps in an enclosure of some sort, before being shipped downriver. European bison may have been a relatively new addition to the imperial *venationes*, since this inscription mentions such animals for the first time in extant Latin epigraphy.<sup>49</sup> The army units mentioned in this inscription, all of which have been previously attested in Moesia, may well have captured wild animals for the games on numerous occasions. Another inscription from Montana, dating to AD 155, mentions the *venatores immunes* Julius Longinus and Flavius Valerius of the Eleventh Legion.<sup>50</sup>

Another *venator immunis*, a certain Licinius Valentinus, is known to have been in the Second Parthica Legion.<sup>51</sup> Since this legion was stationed near Rome, the individual in question, if we assume that he was involved in animal-capture rather than hunting food for the legion, may have been involved in capturing wild animals in central Italy specifically for *spectacula* in Rome. Another possibility is that Valentinus held the post of *venator* in a frontier province before being transferred to Italy.

An inscription from Britain attests to the existence of hunters among the legionaries posted to that province. The inscription, found at Birdoswald on Hadrian's Wall, is dedicated to the god Silvanus by the *venatores Bannieses* from the camp or *vicus* of Banna.<sup>52</sup> Although it is theoretically possible that these hunters were merely involved in rounding up provisions for the other soldiers stationed in the area, the dedication to Silvanus, as well as the proud use of the term *venator* suggests a more 'glorious' profession, such as capturing animals for *spectacula* in Rome and elsewhere. The area beyond Hadrian's Wall would of course be a suitable area to hunt for exotic animals, such as the Caledonian bear mentioned by Martial.<sup>53</sup>

It is also possible that another inscription from northern Britain dedicated to Silvanus may relate to the capture of animals for the *spectacula*. The inscription in question records a dedication made by the prefect of the *ala Sebosiana*, Gaius Minicianus, for capturing a huge boar which had previously escaped other hunters (*...ob aprum eximiae formae captum quem multi antecessores eius praedari non potuerant...*).<sup>54</sup> The fact that the boar was not slaughtered in the hunt raises the possibility that it was not intended for the mess hall: it may instead have been sent to a local enclosure to await an upcoming *spectaculum*. If the boar had been merely hunted for sport, it again seems odd that it was not simply killed rather than captured. Perhaps the *antecessores* mentioned in the inscription were *venatores immunes* from the *ala Sebosiana* or other units previously assigned by local

authorities to capture the animal, which was evidently quite well known in the area because of its massive size.<sup>55</sup>

Some evidence also exists for military officials associated with the *spectacula* in the eastern half of the empire. An inscription found near Serdica records an unnamed individual as a φιλοκύνηγος βενεφικιάριος.<sup>56</sup> If the epithet φιλοκύνηγος does not merely refer to this individual's fondness for the *venationes* in the arena, or his passion for hunting in the field, it may allude to some duty he performed as *beneficiarius* in rounding up animals for the spectacles or supervising these activities.

Firmer evidence for the involvement of eastern troops in hunting duties comes from Dura-Europos. The *dux ripae* and his troops stationed in this city evidently shared a passion for hunting with many of their civilian contemporaries, as evidenced by the numerous hunting scenes found at the site. The area around Dura-Europos was rich in wild game, such as lions and wild boars: decades after the site was destroyed, Julian's troops killed a lion found near its ruins.<sup>57</sup> Given the abundance of wildlife in the vicinity of the city, a number of troops in its garrison may have been assigned to hunt and capture various animals for the *spectacula*. These could have included *venatores immunes* attested elsewhere in the empire.

Several of the soldiers from the *cohors XX Palmyrenorum* recorded in troop rosters at Dura-Europos have the notation *ad leones*, which suggests that they were either responsible for hunting lions in the area or perhaps looking after captured lions in the fort and escorting them for a distance on their way west. The latter function is suggested by the fact that in the fifth century the *duces limitis* were assigned to provide animals for imperial *venationes*: as Rostovtzeff remarks, this task may have earlier been one of the responsibilities of the *dux ripae* in Dura-Europos.<sup>58</sup> Sozomen (see below) notes that in the late empire at least, soldiers could indeed be assigned to the care of lions in captivity. It has been suggested that the notation *ad leones* is a place-name rather than a troop assignment, which is possible: even if the



theory is correct, however, this particular place-name may well have been inspired by the activities (ie lion-hunting) of the soldiers stationed there.<sup>59</sup>

Several of the graffiti and wall-drawings found at Dura-Europos, depicting horsemen in pursuit of various animals, may in fact allude to the hunting-activities of these troops. The names added to some of these figures, such as Victor, Ἀββδου, and Ἀλεξας, are similar to the names of mixed origin found in the troop rosters. In addition, the Parthian costume and weaponry borne by these huntsmen would be consistent with eastern troops from the *cohors XX Palmyrenorum*.<sup>60</sup> A prime example of these depictions is the graffito of a mounted archer, carrying a Parthian composite bow and wearing what appears to be a Parthian-style helmet. His horse is also covered in full armour, such as that employed by Sassanian cavalry. The archer himself, however, is apparently wearing no other armour apart from his helmet, which suggests he is out on a hunting expedition rather than on campaign (Fig. 41).<sup>61</sup> Another drawing found at Dura-Europos shows a pair of what appear to be gazelles in flight: although their pursuer is not depicted, one can imagine it to be one of these mounted huntsmen.<sup>62</sup> The fact that most of these scenes show animals being shot at should remind us that the primary task of these hunters was to kill animals for food: rounding up animals for the *spectacula* would have been a subsidiary activity.

At this point one should address Davies' suggestion that the capture of animals carried out by the military was primarily for the purpose of providing uniforms for Roman officers: *signiferi*, *aquiliferi*, *imaginiferi*, and *cornicenes* are known to have worn both bear and lion-skins as part of their uniforms.<sup>63</sup> According to Davies, if there were hunters in the army who specialized in capturing specific types of animals for the arena, one would expect to find such terms as *luparius* and *leonarius* in the extant sources.<sup>64</sup> Davies' reasoning in this instance seems flawed in at least two respects. Wolves were not normally involved in Roman *spectacula*, so we should

not expect to find in any case *luparii* in the military: in addition, although *leonarii* are not mentioned in the extant sources, soldiers assigned *ad leones* are.

The Dura-Europos troop roster records seven *signiferi* in the *cohors XX Palmyrenorum* for the year 219, and four for the year 222. Exactly the same number of troops assigned *ad leones* is recorded for each of these years: in 219, five infantry and two horsemen participated in the hunt, while in 222 the hunting party consisted of three infantry and a single horseman.<sup>65</sup> Although both these groups were quite small, it is possible they, along with any civilian assistants they may have had, could capture far more lions in the course of a year than the *signiferi* and the other officers of the cohort would need for their uniforms. Although it is possible that excess lion-skins could have been sent from Dura-Europos to other military detachments throughout the empire, it is more likely that live lions captured by hunters were sent to Rome and other larger centres for the *spectacula*. After the lions had been slain their skins could be easily removed and then sent to military units throughout the empire. Since the meat of animals slain in the *venationes* was distributed to the populace in Rome, it should not surprise us if the skins of dead animals were also used.<sup>66</sup>

A papyrus found in Egypt also attests to the capture of animals for the *spectacula* in the eastern empire. It is of course not surprising that such evidence survives from Egypt, since this province was evidently a prime source of arena animals such as hippopotami and crocodiles. The evidence in question consists of a letter dating to the late first or early second century AD, written by a soldier of an auxiliary regiment stationed at Wadi Fawakhir:

Antonius Proculus to Valerianus. Write the note to say that from the month of Agrippina until now we have been hunting all species of wild animals and birds for a year under the orders of the prefects. We have given what we caught to Cerealis and he sent them and all the equipment to you [...]<sup>67</sup>

The fact that Proculus and his colleagues were involved in hunting all sorts of animals for an entire year strongly suggests that they were capturing animals for

the arena rather than for their fellow-soldiers to eat. The latter task would not require a wide variety of animals, since deer and boars appear to have been by far the two frequent animals consumed by Roman soldiers.<sup>68</sup> Soldiers would also likely not have to report to their superiors about such a mundane activity as capturing game for their diet.

The letter suggests rather that various units, at least in Egypt, were assigned by their superiors to capture wild animals, perhaps on a rotating basis, for the games and imperial *vivaria*. It is unclear whether these duties were assigned on an *ad hoc* basis, such as when a large *venatio* was upcoming in Rome, or were always assigned to at least one unit from year to year. The equipment mentioned in the letter appears to have consisted of the cages, nets, and other implements necessary for capturing the animals, which, interestingly enough, were evidently not owned by the soldiers, but only borrowed by them from their superiors. The addressee of the letter, Valerianus, was apparently a higher government or military official responsible for distributing the equipment to troops assigned to capture animals, and then collecting any animals they subsequently caught. Perhaps there was both a *vivaria* and central hunting-equipment repository in Alexandria or one of the other major Egyptian cities, from which frontier hunts like that recorded in the letter could be organized.

The capture of wild animals by Roman troops stationed in Egypt, at a much later date, is also attested to by another letter found in the Fayum. The document in question, written in the mid-fourth century AD, records the devastation of crops by a large herd of gazelles (τὰ δορκάδια) in the area. At the request of the affected farmers, a local priest wrote to the commander of a nearby detachment of cavalry, Abinnaeus, requesting the use of nets stored at regimental headquarters in order to get rid the offending beasts.

...I will write to you, brother; for I have heard that there are nets stored at the standards. If it is possible send them to me for a few days, since the gazelles are destroying the sown crops...<sup>69</sup>

As Bomgardner suggests, the use of nets, rather than spears, may indicate that the captured gazelles were intended for an upcoming *venatio* (or display).<sup>70</sup> Another interesting aspect of this letter is the close cooperation between civilians and the military in capturing various animals for the games, which was evidently not an unusual occurrence.<sup>71</sup>

Some Roman soldiers were evidently assigned more specific hunting duties. Specialized bear-hunters or *ursarii* are attested in numerous military inscriptions from different areas of the empire including the German frontier.<sup>72</sup> The latter area appears to have been particularly rich in bears in antiquity, to judge from an ancient inscription found near Trier dedicated to the bear-goddess Artio.<sup>73</sup> Le Roux quite reasonably suggests that soldiers may have specialized in the capture of different animals in different regions of the empire: apart from the *ursarii* hunting bears in the German provinces, we have already seen that evidence exists for soldiers hunting the native lion population in the eastern empire.<sup>74</sup>

A third century(?) inscription found at Xanten contains a dedication to the god Silvanus by Cessorinius Ammausius, *ursarius legionis XXX*. Although Wiedemann suggests that Cessorinius was an arena *venator*, this individual may have been one of the *venatores immunes* assigned to capturing bears for the games, rather than one of the participants.<sup>75</sup> Another inscription from nearby Cologne also appears to attest to the activities of the *ursarii*, although it does not specifically mention them by name. The inscription, set up by the *legio I Minerva*, commemorates the capture of fifty bears within a six-month period by the centurion Tarquitius Restitutus.<sup>76</sup> Von Domaszewski's surmise that these bears were only captured as a form of animal control after they had wandered into Roman territory from the forests of free Germany, because of a particularly harsh winter, is less than convincing.<sup>77</sup> The centurion *ursarius* was more likely sent out, undoubtedly with a number of assistants or soldiers from his own century, on a specific mission to capture bears for the *spectacula* and other purposes. The mention of a specific time-period in the

inscription suggests that specialized hunters within the legion may have been given quotas of animals to capture in a preset period of time: the *legio I Minerva* set up this inscription because Restitutus had so far exceeded his particular quota by capturing fifty bears within the six-month period he was originally assigned. Such long hunting assignments were apparently only meant to be pursued on a part-time basis: it is difficult to imagine Restitutus being granted leave from his duties as centurion for a half-year while he went off and hunted bears.

An engraved glass dish produced in Cologne, and discovered near Bonn, also attests to the activities of bear-hunters in the German provinces (Fig. 42). The grave to which this object originally belonged dates from c. 350 to 375.<sup>78</sup> The dish was preserved in fragments, but enough of these survive to restore with accuracy the decorative scene and inscription on the dish. The inscription *VTERE FELIX* originally ran around the rim, while a mounted hunter springing over a bear was depicted in its centre.<sup>79</sup>

Although one cannot be certain, the dress of this individual suggests that he is a soldier rather than a civilian hunter. The hunter wears a long *chlamys* and tunic, whose vertical decorative stripes are still visible. A wide diagonal band also runs across the front of the rider's tunic. Around his waist he wears a broad, buckled belt. What appears to be a large patch on his right shoulder is evidently some sort of clamp for his cloak, although it looks like one of the decorative shoulder patches common in the costume of the later empire, as seen, for example, in the 'Great Hunt' mosaic from Piazza Armerina.<sup>80</sup>

Although the rather curious looking creature underneath the rider looks at first glance more like a lion, Kleeman maintains that it is in fact a bear. The peculiar type of hatching used to indicate the animal's pelt on the dish is seen also in other Roman depictions of bears. The pointed head and relatively small mouth of the creature is also characteristic of bears rather than lions. In addition, one would of

course expect a piece of artwork produced in Germany to depict a local animal like a bear, as opposed to an exotic feline.<sup>81</sup>

The most interesting aspect of the scene represented on the dish is the device held in the hunter's right hand. Numerous hunting scenes like this one depict a mounted hunter, armed with a spear, about to impale the bear or other animal below him, but the hunter in this scene does not appear to be holding any such weapon.<sup>82</sup> The long object held by the hunter appears to consist of three lines extending vertically out of his right hand, as well as two lines continuing down behind his raised arm and three more lines just visible beneath his horses' hind legs. Although this implement is long and thin enough to be a spear, its position is wrong: if the hunter were preparing to thrust down upon the animal below him, as seen in so many ancient hunting-scenes, the spear would have to be held in front of and not behind him as it is in this particular depiction. Another problem with interpreting the object as a spear is the position of the hunter's hand. If he were indeed holding such a weapon, one would expect his fingers and thumbs to be tightly grasping its shaft. The hunter's right hand, however, is held open and the device appears to be merely resting on his palm, presumably so that it could slide freely. What in fact he holds is some sort of noose or rope used in capturing the bear: the moment just before the bear's capture is depicted, when the hunter has swung the rope behind his right shoulder and is about to hurl it over his quarry's head.<sup>83</sup>

The inscription on the dish, *VTERE FELIX*, is commonly found on Roman artefacts. But the unusual scene inscribed on it has no parallels.<sup>84</sup> This depiction of a hunter capturing a bear is unusual enough that, as Kleeman suggests, the dish may have even been specially commissioned by a hunter or soldier who regularly performed this activity (...ihnen [the hunter]...nicht unbekannten Tätigkeit, die man ja fast als eine berufliche bezeichnen könnte...).<sup>85</sup> Although other examples of this type of decoration may not have survived, the dish in any case provides further evidence of the capture of bears for the Roman *spectacula* in the Rhineland.

Another group of specialist troops associated with the capture of animals for the arena may have been the *vestigatores*, who, as we have seen, were also active in the civilian sphere. The *Cestes* of Julius Africanus (see above) may refer to such specialists in the army: in a section devoted to the proper technique of lion-capture to be used by the army, Africanus mentions that the animal's lair must first of all be located by the trackers specializing in large felines (...οἱ τῶν ἀλκίμων ἰχνευταί...).<sup>86</sup>

A sigillata fragment from the fort of Zugmantel in Germany's Taunus Mountains attests to the presence there of such *vestigatores*. The fragment in question bears the potter's stamp DEXTER as well as the scratched inscription *vesstigatorum*. This group was active in at least the second half of the second century, since that is the period when the potter Dexter produced his wares. As Egger states, the *vestigatores* at Zugmantel may have assisted *venatores immunes* also stationed there in procuring as many animals as possible for the local governor's *vivarium*.<sup>87</sup>

The Taunus region in northern Germany was likely rich in wild animals sought after for the *spectacula* in Rome and elsewhere, such as bears and boars. Given the presence of *vestigatores* at Zugmantel, it does not appear unreasonable to assume that specialist hunters such as *ursarii* may have been posted there as well. A bear-trap found at the fort supports this conjecture.<sup>88</sup> Conversely, Wahl has suggested that the single *vestigator* pottery fragment from Zugmantel, along with what he sees as a lack of evidence for a *vivarium* at the site, may indicate that the *vestigatores* were not actually posted at Zugmantel, but merely passed through there on the course of their rounds: both *vestigatores* and *venatores* in the army may have travelled around to various forts during their hunting expeditions, rather than operate from a single base. Such a theory would also explain the inscription set up at Birdoswald on Hadrian's Wall by *venatores* from another nearby garrison.<sup>89</sup>

A first or second century papyrus fragment, whose precise place of origin is unfortunately unknown, also attests to the presence of *vestigatores* in Roman

Egypt.<sup>90</sup> The document consists of a letter between two brothers, in which a οὔεστιγάτορος is mentioned. Although there is no firm evidence that these two brothers were members of the army, the *vestigator*, rather than being a private citizen, was likely a soldier. The use of a Latin term transliterated into Greek (οὔεστιγάτορος) for this person, instead of the simple Greek translation of the term, suggests that the word was an official designation rather than merely a description of this individual's civilian occupation.

The two brothers in this letter were evidently acting as intermediaries in shipping the *vestigator's* captured quarry to points and persons unknown. Mention is made of receiving supplies (κομίσαντον), presumably for a trip either on the Nile or the Mediterranean (καταβῆναι καὶ ταχέως ἀνηβᾶναι). The letter also records a receipt and other necessities(?), evidently passed on from the *vestigator* to the brothers (διὰ τοῦ οὔεστιγάτορος...ἀλλὰ ἐπίδες...τὸ πιτᾶκκιον). They were presumably instructed to pass on the receipt to the *vestigator's* superiors after the animals they transported had reached their intended destination.<sup>91</sup> Although the identity of the animals implied by the previous papyrus cannot be determined, it seems plausible, given that an army *vestigator* was involved in the transaction, that wild animals were being requisitioned for official purposes, perhaps for an upcoming *venatio*.

On occasion, Roman soldiers were sent on specific, long-distance missions to capture various exotic animals. These missions have a precedent in the Hellenistic period: in the early third century BC Ptolemy II sent his troops south into Ethiopia on an animal-capturing expedition.<sup>92</sup> Dio records that Septimius Severus' praetorian prefect Plautian had some of his centurions steal zebras sacred to Helios from "islands" in the Red Sea.<sup>93</sup> Unfortunately Dio is not specific about the name or location of the islands. Since zebras are native only to the mainland of Africa, Jennison speculates that these animals were stolen from the Red Sea islands while en route to Persia, perhaps for one of the Parthian king's menageries.<sup>94</sup>



A controversial inscription from North Africa may record the capture of lions by Roman troops. The inscription comes from Aguenéb, located on the south flank of the Atlas mountains in present-day Algeria, and records the presence there in 174 of troops drawn from the *cohors VI Commagenorum* and the *ala Flavia*.<sup>95</sup> These units in turn were normally attached to the *legio III Augusta* stationed in Lambaesis, some 400 kilometres east of where this inscription was found.<sup>96</sup> The dedicator of the inscription, a centurion of the legion named Catulus, thanks the current governor of Numidia, Marcus Aemilius Macer, for obtaining his admission to the legionary ranks from his prior post of cavalry decurion (*eo die ex decurione sum promotus....Catulus (centurio) [leg(ionis) III Aug]*).

Catulus received this promotion due to the successful completion of a mission whose ultimate objective is uncertain. The assignment was obviously military in nature: for assisting him in this undertaking, Catulus thanks two decurions, a *beneficiarius*, a *duplarius*, and four *sesquiplicarii*. A possible clue to the purpose of this mission is provided at line 12, which begins: *laeones [in] diebus XL f...*

Picard restores the lost word starting with “f” as *fecit*, and conjectures that Catulus had lion statues made as offerings to the god Thasunus (Saturn), to whom the second part of the inscription is dedicated. To support this view, Picard cites other inscriptions in which the dedicator offers statues to Saturn: rock-carvings of lions found in the region of Aguenéb, are also seen as ‘lion-offerings’ to the god.<sup>97</sup> Picard surmises that Catulus and his comrades may have been involved in a punitive expedition against nomads from the Moroccan plateau south of the Atlas mountains, such as the Gaetuli.<sup>98</sup>

Other scholars, such as Mommsen and von Petrikovits, maintain that the inscription refers to an expedition undertaken by Roman troops to capture lions.<sup>99</sup> Mommsen restores the word beginning with “f” as *ferii*, thereby making the inscription refer to live, ‘fierce’ lions rather than statues of them. Picard’s arguments for stating that the inscription records the dedication of lion sculptures to

Saturn do appear rather slim: none of the other inscriptions he uses as supporting evidence for his theory actually mentions the dedication of such lion statues to Saturn, and the local rock sculptures he suggests were such offerings may have been purely secular pieces of decorative artwork. The lion rock-carvings Picard cites as evidence for his interpretation of the inscription may instead testify to the large population of lions to be found in the Atlas mountains in antiquity, a population that was seriously depleted by the Romans. Only a few of these animals remain in the region today.<sup>100</sup> Although a Roman raid against Saharan nomads is certainly plausible, given the problems the latter often caused for the Roman administration in Africa, if the mission really was a punitive expedition against some troublesome tribesmen, one wonders why no legionary detachments were sent: only units of the *cohors VI Commagenorum* and the *ala Flavia* are recorded in the text.

The expedition in question appears rather to have been quite small in scale. In contrast to other inscriptions commemorating successful expeditions, so large that the dedicator cannot go into great detail about what units or officers may have participated, Catulus lists seven officers who assisted him (*hi iuvantes*) in this mission.<sup>101</sup> Catulus may well have been more than just a participant in this expedition, perhaps its actual commander, who thoughtfully thanked all of the subordinate officers assigned to him on this mission. They were evidently sent with only a small body of troops to fulfill their task, some of whom were possibly *venatores immunes*.

A number of other Roman military expeditions in Africa may also have been at least partially concerned with 'scouting out' or capturing animals for the arena. The geographer Ptolemy records that a certain Julius Maternus, following an earlier Roman campaign under Septimius Flaccus against the Garamantes, made a march of four months south from Lepcis Magna to the territory of Agisymba, in Ethiopia, with the assistance of the king of these same Garamantes. Without specifying the location of Agisymba any further, Ptolemy elsewhere states that it lay on the edge of *terra*

*incognita* in Africa. Apparently, the most notable aspect of the region were the rhinoceroses who came there to mingle or procreate (the Greek is ambiguous).<sup>102</sup>

Although this expedition in the past has been loosely dated to between 77 and 110, it may be possible to narrow down its date even further. A coin-type issued by Domitian between 83 and 92 bears on its reverse a depiction of a two-horned rhinoceros. The Romans had been aware of such animals since at least the second century BC, but only one-horned rhinoceroses are mentioned by the literary sources prior to the late first century AD. The one-horned animals displayed in spectacles of the early empire were likely imported by the Romans from the Red Sea coast of Africa, following the precedent set by Ptolemaic traders.<sup>103</sup> The earliest classical author to mention a two-horned beast is Martial, who describes a rhinoceros appearing in a Roman spectacle as having a *cornus geminus*.<sup>104</sup>

Martial is evidently describing a black rhinoceros of the *diceros bicornis* variety, whose horns do not differ nearly so much in size as those of the white rhino, the other two-horned species native to Africa. The creature depicted on the coinage of Domitian, with its two horns of almost equal length, appears to be of the *diceros bicornis* variety. If the region of Agisymba lay somewhere in the southern Sahara, the animals seen by Maternus and his men were also in all likelihood black rhinoceroses, since these are able to live on far less water and vegetation than their white counterparts.<sup>105</sup>

Although two-horned rhinoceroses had evidently appeared occasionally in Rome as early as 80, to judge by the epigram of Martial, a great many more of these animals may have been made available to the Romans by the expeditions of Flaccus and Maternus.<sup>106</sup> According to Desanges, the Septimius Flaccus mentioned by Ptolemy should be identified with Suellius Flaccus, pro-praetor of the Third Legion, who is known to have campaigned against the Nasamonians in c. 86. As a result of this campaign, friendly relations were established with the Garamantes, leading their king to assist the civilian Maternus in his trading expedition to Agisymba. The new

source of rhinoceroses discovered by Maternus allowed Domitian to stock his various spectacles with such animals, a fact advertised on his coinage (Fig. 43).<sup>107</sup>

Although Desanges' theory is plausible, it is more likely that the otherwise unknown Maternus was a military commander or high official, rather than a civilian merchant. It is unlikely that the king of the Garamantes himself would assist this expedition unless it were headed by an individual with high official rank, and only such an individual would presumably be able to gather the necessary resources for a four-months' trek through the Sahara. If Maternus was indeed a military commander, he would merely be following in the footsteps of other officers like Flaccus who made expeditions into unknown territory. In all events Maternus, even if a civilian official, would undoubtedly be accompanied by a detachment of Roman troops for such a potentially dangerous journey, particularly if one of the objectives of the expedition was to capture animals for the games.

A similar expedition which may have also been at least partially 'zoological' in nature was one undertaken during the reign of Nero: Pliny the Elder records that *exploratores* at this time advanced south from Egypt as far as Meroe.<sup>108</sup> According to Pliny, the scouts encountered parrots and monkeys during this journey, as well as the tracks of elephants and rhinos near Meroe. The recording of such seemingly trivial details suggests that one of the primary aims of this expedition may have been to record the previously unknown fauna of the region. Since ancient Ethiopia is known to have supplied animals to the Romans on various occasions, no doubt at great expense to the buyers, it does not appear at all unlikely that the Romans would have attempted to scout out and secure their own source of such animals. Elephants and rhinoceroses may well have been two of the exotic animals most coveted by the Romans, which perhaps explains why the *exploratores* even bothered to mention seeing their tracks, perhaps as an incentive to further exploration.

*Military Vivaria and Venatores:*

After various animals had been captured by the military, they would have to be kept in animal-enclosures (*vivaria*), before being shipped to their ultimate destinations. An inscription found in Germany suggests that units of the Roman army may have maintained their own *vivaria* for captured animals before they were sent back to Rome. The inscription in question comes from Cologne, and concerns a dedication to Diana from a certain Aulus Titius Severus, centurion of the Sixth Legion, who *idemque vivarium saepsit*.<sup>109</sup> Although, as Toynbee states, the *vivarium* in question could theoretically have been for "commissariat use", the dedication to the goddess of hunting and wild animals, Diana, as well as the evident pride of the soldier in enclosing this structure, suggests a more important purpose for this building.<sup>110</sup> Cologne's central position on the Rhine would make it an ideal 'collecting point' for animals captured in and beyond the two German provinces before their shipment elsewhere, especially since it was the headquarters of the *classis Germanica* after 89 AD.<sup>111</sup>

The fort at Cologne was apparently not the only military site to possess an animal-pen. Archaeological evidence found at Zugmantel and Dambach suggests that these two sites may have also had their own enclosures for captured animals.<sup>112</sup> The circular enclosure excavated at the Lunt fort in England has also been interpreted, among other possibilities, as an animal-pen of some sort.<sup>113</sup> Jennison's suggestion that frontier forts with amphitheatres may well have all possessed their own *vivaria* for captured animals may go too far, but certainly a substantial number of military animal-enclosures must have existed in frontier provinces throughout the empire in order to keep the various imperial and local *spectacula* well-supplied.<sup>114</sup>

Other evidence suggests that some cities in the empire may have possessed animal-enclosures administered by Roman troops, much like the *vivarium* of the Praetorian Guard in Rome. The existence of at least an *amphitheatrum castrense* in

Carthage is suggested by the account of Perpetua's martyrdom in the early third century, which refers to the event as a *munus castrense*. More specifically, the chronicle of Prosper Tiro records that Perpetua and Felicitas were "...in castris bestiis deputatae."<sup>115</sup> Presumably, if troops in Carthage administered this spectacle, they may well have also looked after the animals employed in such an event. Sozomen records a certain Arcasius, of Persian stock, who during the reign of Licinius(?) served in the Roman military as keeper of the imperial lions (...στρατιώτου...θηροκόμου τῶν βασιλικῶν λεόντων...),<sup>116</sup> The lions under the care of Arsacius were presumably kept in an imperial *vivarium* similar to that known at Rome.

Roman soldiers on the frontiers appear to have also had their own troupes of gladiators and arena *venatores*. Combatants based at *ludi* in Rome and Italy may well have been reluctant to travel to the frontiers to entertain these troops, no matter what they were paid. A late second century beaker found at Colchester, decorated with scenes of gladiators and *venatores*, names one of the combatants as *Valentinus Legionis XXX*. Since the Thirtieth Legion was based at Xanten in Germany, the gladiators depicted on the beaker may have travelled from Germany to entertain the troops in Britain.<sup>117</sup> This suggestion is strengthened by the fact that all of the individuals depicted on the beaker are named, such as the *venatores* Secundus and Mario. Combatants evidently popular enough to have their names recorded on this vessel may well have been the type of 'celebrities' the military authorities would have ordered to perform at a spectacle in another province.<sup>118</sup>

The rim and cap of what Wahl describes as a "Gladiatorenhelm" found near Nijmegen also attests to the existence of gladiator and *venator* troupes attached to various Roman army units. The upper rim of the helmet is decorated with various *venatio* scenes, while its underside bears the inscription *I(egionis) XV*, which indicates that the helmet's owner must have been attached to this legion in some capacity. This helmet must therefore must have been manufactured before 70 AD, when the *legio XV Primigenia* left its base in Nijmegen.<sup>119</sup> Although Wahl assumed

that the helmet in question belonged to a gladiator, the *venatio* scenes decorating it suggest that its owner may have been a *venator*. Although *venatores* normally fought without head protection, the use of helmets was not unheard of amongst such combatants (see page 118).

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Notes:

<sup>1</sup> Marrou (1978) 271.

<sup>2</sup> Ampolo (1971) 234-35.

<sup>3</sup> Beschtaouch (1977) 501-03; Ampolo (1971) 250-51. Although the 'Bonufatius' mosaic dates to later in the fourth century than that of the 'Great Hunt', it is perfectly plausible that one or more of the *venatio* corporations were associated with, or even owned, the villa at the time the earlier mosaic was commissioned. Ampolo [(1971) 251] notes that the name Bonufatius is also found on a mosaic from the House of the Peacock in Carthage, dating to the reign of Constantine. Was this perhaps the individual responsible for shipping many of the animals depicted in Piazza Armerina from North Africa to Ostia?

<sup>4</sup> Taubenschlag (1955) 663-64.

<sup>5</sup> Dunbabin (1978) 52-54, 60.

<sup>6</sup> Dunbabin (1978) 62-63.

<sup>7</sup> Egger (1967) 19-20.

<sup>8</sup> Varro, *De Lingua Latina*, 5, 94.

<sup>9</sup> Egger (1967) 20.

<sup>10</sup> Egger (1967) 21.

<sup>11</sup> Egger (1967) 21-22.

<sup>12</sup> *Itineraria Antonini Augusti*, 460, 5; Egger (1967) 23.

<sup>13</sup> Virgil, *Aeneid*, 4, 121; Seneca, *Phaedra*, 1; Egger (1967) 22.

<sup>14</sup> Pliny, *NH*, 10, 27; Egger (1967) 24.

<sup>15</sup> Egger (1967) 24.

<sup>16</sup> Egger (1967) 24; Egger (1966) 619.

<sup>17</sup> Egger (1966) 619.

<sup>18</sup> Egger (1966) 620.

<sup>19</sup> Egger (1966) 615-16; See also Dio 77, 9, 2.

<sup>20</sup> Egger (1966) 614, 621; Oppian, *Cynegetica*, 4, 112f.; 439f.

<sup>21</sup> Egger (1966) 621.

<sup>22</sup> Egger (1966) 618-20.

<sup>23</sup> Egger (1966) 622-23.

<sup>24</sup> Egger (1966) 621.

<sup>25</sup> Egger (1966) 621-22.

<sup>26</sup> Egger (1966) 621.

<sup>27</sup> CIL 13, 5708; Keller (1913) Vol. 1; 281.

<sup>28</sup> Frontinus, *Strategems*, 4, 3, 14; Bruns (1909) 308-09.

<sup>29</sup> Depending on the restoration one prefers, one can restore the last phrase in the inscription as *stellas omnes ex cornicibus alcinis* or *sellas omnes ex cornicibus alcinis*; see Keller (1913) Vol. 1, 281; 431, n. 195.

<sup>30</sup> This translation is almost entirely based upon that of Lewis and Reinhold (1966) 279. The cremation of the deceased's valuables along with his corpse was evidently a long-standing Gallic custom [see Caesar, *Commentarii de B. G.*, 6, 19, 4].

<sup>31</sup> For the *formidines*, see e.g. Apuleius, *Apologia*, 60.

<sup>32</sup> For the restoration of this line, which differs slightly from that presented in CIL,

see Bruns (1909) 311.

<sup>33</sup> Pliny, *NH*, 7, 56. If Sextus' vessel were merely a fishing-boat or the like, I believe he would have called it a *scapha* or the like, rather than using the somewhat 'grandiose' term of 'Liburnian' to describe it.

<sup>34</sup> Casson (1995) 125-27, 141-42.

<sup>35</sup> Casson (1995) 162: cf. Bounegru and Zahariade (1996) 55-56.

<sup>36</sup> Tacitus, *Germania*, 9, 2.

<sup>37</sup> Greene [(1990) 19] points out that boats constructed of reed-bundles were common in areas where the local tree-trunks were not large enough to permit the building of log-boats. Reed-boats were also commonly used in cases where the deck area of a boat was considered more important than its volume. Sextus may have required a vessel with a relatively large deck area if he was indeed transporting animals on it.

<sup>38</sup> A certain Gaius Flavius Hostilius from Belluno in northern Italy may also have been involved in capturing animals, perhaps for the games, but the evidence is not conclusive. Hostilius' sarcophagus, manufactured in c. 250, depicts a hunting scene similar to those found on numerous other sarcophagi. Certain unusual details of the scene, however, such as a bear cub being carried in a net, suggest that the scene may bear some relation to the deceased's occupation in life: see Anderson (1985) 129; Gabelmann (1973) 72-75; Rodenwaldt (1937) 137.

<sup>39</sup> Marrou (1978) 262-67.

<sup>40</sup> Marrou (1978) 261-62, 268-71: cf. Vegetius 2, 18.

<sup>41</sup> Marrou (1978) 271: Manganaro (1982) [497-98] suggests that the villa of Piazza Armerina, together with its associated *municipium*, was overseen by an imperial official, most likely a *procurator*. Such an individual would perhaps have to be of high military rank (ie. *magister militiae*?) to oversee troops throughout the empire, as the 'Great Hunt' mosaic suggests: see also Settis (1982) 529.

<sup>42</sup> Frere and Tomlin (1991) Vol. 2(3); 56, n. 2427.26: Campbell (1994) 83-84. Peacocks were not included in Roman *spectacula*, but were popular pets and/or delicacies among wealthy Romans [see Toynbee (1996) 250-53], and so could be captured, like other animals destined for the arena.

<sup>43</sup> Julius Africanus, *Cestes*, 14: Marrou (1978) 273-74.

<sup>44</sup> Vegetius, 1, 7: Milner (1993) xxvii-xxix.

<sup>45</sup> Marrou (1978) 274-75.

<sup>46</sup> *Notitia Dignitatum*, Oc. 5, 193; 7, 45. Roth [(1999) 27] suggests that the military *venatores* and *vestigatores* attested to in various sources were all involved in procuring meat for Roman soldiers, but as will be argued below, I prefer to see at least the majority of them as being involved with the capture of animals for the *venationes* and other purposes.

<sup>47</sup> Velkov and Alexandrov (1988) 271-73.

<sup>48</sup> Velkov and Alexandrov (1988) 274. Bounegru and Zahariade [(1996) 42] suggest that the animals would be transported to Rome across the Adriatic, but despite being shorter, this route would of necessity involve some overland travel, which the Romans would likely avoid if at all possible: also see Devijver (1992) 143.

<sup>49</sup> Velkov and Alexandrov (1988) 274-275.

<sup>50</sup> CIL 3, 7449: Velkov and Alexandrov (1988) 273-74. For a definition of *venatores immunes*, see page 71.

<sup>51</sup> *AE* 1975, 160.

<sup>52</sup> ILS 3548.

<sup>53</sup> *De Spectaculis* 7, 3. It has been suggested that the circular enclosure at the Lunt fort, possibly a *vivarium* (see below), may have been used to hold captive bears. Bears in the past may have been relatively numerous in the area of the Lunt, as judged, for instance, by the bear on Coventry's coat-of-arms: private communication, M. Rylatt, Site Director, Lunt Roman Fort.

<sup>54</sup> ILS 3625. The use of the term *praedari* indicates that the boar was captured, rather



than killed: see Le Roux (1990) 210-11; Devijver (1992) 146.

<sup>55</sup> However, see Davies (1989) 193, who thinks the boar was merely hunted for sport.

<sup>56</sup> Robert (1971) 322-23.

<sup>57</sup> Rostovtzeff (1952) 47-48: For the lion killed at the ruins of Dura, see Ammianus Marcellinus 23, 5, 7.

<sup>58</sup> Welles (1959) 41; Rostovtzeff (1952) 48-49: For the *duces limitis* see CT 15, 11, 1-2.

<sup>59</sup> Davies (1989) 249, n. 104.

<sup>60</sup> Rostovtzeff (1952) 49.

<sup>61</sup> Rostovtzeff (1952) 66-68.

<sup>62</sup> Rostovtzeff (1952) 66.

<sup>63</sup> Davies (1989) 170.

<sup>64</sup> Davies (1989) 280, n. 92.

<sup>65</sup> Davies (1989) 44, 170.

<sup>66</sup> For the distribution of 'arena meat' in Rome, see Kyle (1998) 189-94.

<sup>67</sup> Davies (1989) 193.

<sup>68</sup> Davies (1989) 193.

<sup>69</sup> Bell (1962) 44-46, n. 6.

<sup>70</sup> Bomgardner (1992) 163.

<sup>71</sup> Another letter from the Abinnaeus archive [Bell et al. (1962): 81-83, n. 31] also suggests close cooperation between soldiers and civilians in hunting and/or capturing animals for the games. A certain Thareotes, evidently a civilian, wrote to Abinnaeus, informing him that he would be bringing hunters to make nets in March. In preparation for their arrival, Abinnaeus was to make ready the cords of hemp for the netting.

<sup>72</sup> Velkov and Alexandrov (1988) 273-74.

<sup>73</sup> Kleeman (1963) 206.

<sup>74</sup> Le Roux (1990) 211.

<sup>75</sup> AE 1901, 72; Wiedemann (1995a) 45.

<sup>76</sup> CIL XIII, 8174; Kleeman (1963) 206; Devijver (1992) 143.

<sup>77</sup> Kleeman (1963) 206.

<sup>78</sup> Kleeman (1963) 210-11.

<sup>79</sup> Kleeman (1963) 198-200.

<sup>80</sup> Kleeman (1963) 200.

<sup>81</sup> Kleeman (1963) 203-06.

<sup>82</sup> Kleeman (1963) 206-07.

<sup>83</sup> Kleeman (1963) 200-202.

<sup>84</sup> For the 'ubiquitousness' of the legend *VTERE FELIX*, see Kleeman (1963) 205.

<sup>85</sup> Kleeman (1963) 207.

<sup>86</sup> Julius Africanus, *Cestes*, 14; Marrou (1978) 273-74.

<sup>87</sup> Egger (1967) 20.

<sup>88</sup> Davies (1989) 280, n. 92.

<sup>89</sup> Wahl (1977) 128-29.

<sup>90</sup> Kießling (1960) n. 9272.

<sup>91</sup> Davies (1989) 155-56.

<sup>92</sup> Coleman (1996) 59.

<sup>93</sup> Dio 76, 14, 3.

<sup>94</sup> Jennison (1937) 88-89.

<sup>95</sup> CIL 8, 21567; Picard (1944): 58-59.

<sup>96</sup> Schulten (1925) 1497; Picard (1944) 59-60.

<sup>97</sup> Picard (1944) 58, n. 47.

<sup>98</sup> Picard (1944) 60.

<sup>99</sup> Von Petrikovits (1960) 241.

<sup>100</sup> Hughes (1996) 106.

<sup>101</sup> An example of one of the inscriptions set up to commemorate larger military operations is one found in Rome [ILS, 216], dedicated to the emperor Claudius for the success of his campaigns in Britain. The text makes no mention of the specific units or commanders involved in the fighting.

<sup>102</sup> Ptolemy 1, 8, 4; 4, 8, 2: Desanges (1964) 713-14. The sense of συνέρχονται used by Ptolemy in reference to the rhinoceroses is somewhat ambiguous.

<sup>103</sup> Desanges (1964) 713-16.

<sup>104</sup> Martial, *De Spectaculis*, 26.

<sup>105</sup> Desanges (1964) 716-18.

<sup>106</sup> On the basis of similarities between Martial, *De Spectaculis*, 11 and *Epigrams*, 14, 53, both of which contain the phrase ...*cui pila taurus erat*...in reference to rhinoceroses, Desanges argues that the composition of the *Liber de spectaculis* should be dated to at least 83, instead of the commonly held date of AD 80: see Desanges (1964) 718-722. Martial, in composing the second of these poems, may merely have reused a phrase which he recalled from his earlier work. A single such phrase (which may have been replicated on metrical grounds) does not prove that the two poems were written at approximately the same time: Martial also may merely have been recalling a spectacle of a few years previously when he composed the epigram in Book 14.

<sup>107</sup> Desanges (1964) 722-25.

<sup>108</sup> Pliny, *NH*, 6, 29.

<sup>109</sup> ILS 3265.

<sup>110</sup> Toynbee (1996) 345-46, n. 30.

<sup>111</sup> Ternes (1986) 235. Interestingly enough, the individual mentioned in the inscription shares the rank of centurion with other previously-mentioned soldiers involved in the rounding up of animals for the games, such as the *custodes vivarii* of the Praetorian Guard in Rome: if the limited number of inscriptions concerning military hunting on the frontiers is significant, centurions were considered to be the ideal officers for supervising the small groups of soldiers involved in such hunting expeditions and/or the animals they captured: see Wahl (1977) 129.

<sup>112</sup> Davies (1989) 286, n. 43.

<sup>113</sup> Bateman (1997) 75; Devijver (1992) 144.

<sup>114</sup> Jennison (1937) 141.

<sup>115</sup> *Passio Perpetuae* 7, 9: *MGH, Chronica Minora* 1, 434, n. 757; Bomgardner (1989) 89, n. 21.

<sup>116</sup> Sozomen 4, 16, 6.

<sup>117</sup> Wiedemann (1995a) 45-46.

<sup>118</sup> Wahl (1977) 131.

<sup>119</sup> Wahl (1977) 130-31.

### Principal Venues for Animal Spectacula

In addition to the numerous administrative arrangements necessary for *venationes* and animal displays, proper venues throughout the Empire also had to be built or adapted for their performance. Alterations of pre-existing structures were primarily intended to protect spectators from wild animals. Theatres and stadia were sometimes adapted for events involving animals by removing the lowest rows of seating and/or erecting additional walls or fencing around the floor of the facility. The usual venue employed for animal *spectacula*, however, as in the case of gladiatorial *munera*, was the amphitheatre.<sup>1</sup> The fact that no extant sources record an animal escaping from the cavea of an amphitheatre into the crowd during a *venatio* or animal display suggests that the Romans were quite successful in adapting these structures for the safe staging of these *spectacula*.<sup>2</sup>

#### *The Republican and Julio-Claudian Period:*

The principal site of *venationes* and animal displays in Rome, prior to the construction of the Colosseum, was the Circus Maximus, site of the popular chariot races in the city.<sup>3</sup> Livy records the building of iron cages in the Circus Maximus as early as 174 BC for the animal *spectacula* staged there.<sup>4</sup> The large size of this structure (621 by 118 metres) was ideally suited both for the numerous large animals involved in various events and the thousands of spectators who came to see them.<sup>5</sup> In addition, the *euripus* and *metae* may well have added interest as obstacles both for the animals and their hunters when beast-hunts were held there.<sup>6</sup>

Alterations at the Circus Maximus related to animal *spectacula* were undertaken by both Pompey and Caesar, perhaps a reflection of the relatively sudden increase in the size of such events in the mid-first century BC. Pompey had an iron railing put between the seats and arena of the Circus Maximus in order to protect the

spectators from the elephants fighting there in 55 BC, although it was very quickly broken by these same animals.<sup>7</sup> In 46 BC, on the occasion of his own massive beast spectacle, Caesar had a moat, three metres deep and wide, dug between the seats and arena for these same safety reasons. The area of the arena may even have been enlarged by Caesar at this time in order to make room for his animals to perform.<sup>8</sup>

The Circus Maximus continued to be regularly used for *venationes* like those of Caesar and Pompey (even after the erection of the amphitheatre of Statilius Taurus in 29 BC) until the dedication of the Colosseum in AD 80.<sup>9</sup> Even as late as 204, when Septimius Severus put on the Secular Games in Rome, a large *venatio* with a cage in the shape of a ship, presumably built around the *euripus*, was held in the Circus Maximus.<sup>10</sup> A passage from Claudian also indicates that venues other than the Colosseum, perhaps including the Circus Maximus, were used for *venationes* in Rome at an even later date.<sup>11</sup>

A series of Campanian terracotta plaques, likely dating from c. 50 BC to 50 AD, provide perhaps the best pictorial evidence for *venationes* in the Circus Maximus and the measures taken to accommodate them (Fig. 44). The reliefs depict *venatores* in combat with lions, leopards, and bears amidst various monuments arranged along the centre of the Circus Maximus, including the egg and dolphin lap-markers. One indication of a relatively early date for these panels is the lack of a central *euripus* enclosing the monuments, a structure that appears to have been built by Trajan.<sup>12</sup> Humphrey suggests that the plaques were not inspired by a single *venatio*, but their striking similarity to one another does make this theory of a common antecedent attractive.<sup>13</sup>

Perhaps the most interesting features found on two interconnecting panels are the poles and netting, starting on the left of the *metae*.<sup>14</sup> The initial pole is taller than the turning-posts, but as the net moves right, the height of these poles sharply drops until the net disappears into the ground at the feet of the first group of combatants. Humphrey, perhaps interpreting the representation of this netting too

literally, states that its function was merely to protect the *metae* or to act as a prop for the *venatio*, while Tortorella correctly suggests that it was used to separate the spectacle participants from the audience.<sup>15</sup> The net is presumably shown only in front of the turning-posts so as not to obscure the depiction of the animal and human combatants in the scene.

A number of these plaques also show spectators in multi-storied crenellated towers overlooking the *venatio* beneath. Humphrey suggests that these structures should be identified as *falae*, wooden towers in the Circus Maximus mentioned by authors such as Juvenal and Servius.<sup>16</sup> The placement of these towers within the circus is uncertain, but, as Humphrey states, they were in all likelihood temporary, only erected for specific events. Although these structures may have been used to give magistrates and important spectators a better view of events, individuals within them may have played a more active role in the *venationes* below: Servius states that missiles were shot from such structures, presumably at the animals on the arena floor.<sup>17</sup>

On occasion, the forum could also be used for animal *spectacula* in Rome.<sup>18</sup> Dio records that Caesar constructed some sort of wooden θέατρον κυνηγετικόν surrounded by seats for the games associated with his triumph of 46 BC. Since Dio normally uses the term 'cynthetic theatre' to refer to an amphitheatre in general, the venue constructed by Caesar would have been used for gladiatorial as well as animal combats. In reality, Caesar does not appear to have built an entire new amphitheatre for his games, but merely modified the Roman forum. The subterranean passages discovered under the forum (commonly attributed to Caesar), with twelve trap-doors giving access to ground-level, were presumably used to store equipment, and animals, necessary for the games. The erection of wooden seats around the area on top of these passages would have created a sufficiently large arena, approximately 48 by 18 metres, for Caesar's various spectacles.<sup>19</sup>

On certain special occasions Republican *venationes* and animal displays in Rome could be staged at venues other than the Circus Maximus or the forum. The temporary wooden theatre built by the aedile Scaurus for his games of 58 BC, in which he presumably displayed his leopards and other animals, must have been equipped with some sort of open-work fencing in order to protect the spectators and yet allow them to still see the animals.<sup>20</sup> In 2 BC Augustus flooded the Circus Flaminius to display 36 crocodiles, while in 80 AD the *Stagnum Augusti* was flooded for the *venatio* of 5000 animals staged by Titus. The animals in the latter spectacle were evidently chased off a wooden platform into the pond before being dispatched.<sup>21</sup>

A more sophisticated establishment for various *munera* was the wooden amphitheatre built by Nero near the Saepta Julia in 57. According to Suetonius, this locale was the site of various spectacles, including senators and equestrians fighting in mock gladiatorial combat as well as against wild animals.<sup>22</sup> The fifth eclogue of Calpurnius Siculus is also commonly assumed by scholars to describe spectacles at this same venue. Despite the amphitheatre's being built of wood, it evidently did not lack sophisticated arrangements for the *venationes* and other events staged there: Calpurnius records a golden net set on top of the podium wall to prevent animals from escaping the arena. In addition, wild animals and scenery were raised up to ground level from a substructure under the arena floor, although Calpurnius does not mention whether or not animal cages were actually situated under the arena floor, as in the Colosseum.<sup>23</sup>

#### *The Colosseum and Other Large Amphitheatres:*

The most popular, and most specially adapted venue for animal *spectacula* in Rome was the Colosseum, which appears to have been one of a relatively small number of Roman amphitheatres to incorporate animal-cages in its basement: the

later amphitheatres of Pozzuoli and Capua evidently copied the Colosseum in this regard.<sup>24</sup> Before the addition of permanent substructures to the Colosseum, animals in cages were brought into the Colosseum along the corridors between the seat-sections and through the entrances cut into the podium wall.

Besides the use of trap-doors set into the arena floor of the Colosseum, another method of bringing animals into the arena, which continued to be used as late as the fourth century, was to position them in cages set into recesses along the inner face of the podium wall and facing inwards towards the barricade fence. Sliding doors set into the fence would allow the animals access onto the arena floor once their cage doors had been opened. A small gap likely existed between the bottom plank of the fence and the arena floor in order to allow personnel within the arena to prod with torches nervous animals who had come out of their cages but were reluctant to pass through the fence into the arena.<sup>25</sup>

The intricate basement of the Colosseum, which appears to have been built under Domitian, indicates the importance and popularity animal *spectacula* had achieved in Rome by the late first century (Fig. 45). Ramps leading from ground level outside the Colosseum gave easy access into the basement for animals being brought from their *vivaria* for the games. 64 iron cages (*posticae*) on two levels were built into the outer wall of the Colosseum's basement, while 72 brick arches stood in front of these cages. Lifts which could be raised to just under the floor of the Colosseum arena were in turn located in front of each of these arches. Capstans for raising them were located in the next annular passageway. Ramps leading from these lifts to trap-doors in the wooden floor of the arena allowed both animals and various pieces of scenery to be brought quickly into action upon demand. A further 72 cages on two levels, with lifts adjacent to each cage, flanked the central corridor of the Colosseum's basement. In addition, 36 cages (on a single level) with lifts flanked the two secondary basement passages on either side of the central corridor.<sup>26</sup> The enormous numbers of beasts reported to have been killed in *venationes* given by

emperors like Trajan becomes more plausible when one realizes, with the 172 cages contained in the Colosseum, that over 150 animals at any given time could be brought out in quick succession onto the floor of the arena for slaughter.

A small hole in the rear of each of the Colosseum's cages allowed arena attendants with torches, burning straw, or goads to force reluctant animals into leaving their cages when the time came. Attendants positioned on the walkways above the cages could quickly open and close a series of cage doors using hooks without undue risk to themselves. Movable partitions or fire could be used to force the animals in the desired direction once they had exited their pens and entered the passageway leading to the arena floor.<sup>27</sup> As Bomgardner notes, the highly sophisticated arrangement of the entire Colosseum basement and its cages suggests that it was not a wholly original creation, but any possible design prototypes, if they indeed existed, have yet to be identified.<sup>28</sup>

A curious feature of the *spectaculum* staged by Probus in 281 is that maned lions were not released into the Colosseum from the cages beneath the arena floor, but instead appear to have been brought into the amphitheatre in their small, enclosed, travelling boxes and released from them directly into the fray. The cramped conditions in the latter receptacles would perhaps explain why the animals, stiff with their confinement, were slow to emerge from them onto the arena floor: *neque enim erat bestiarum impetus ille qui esse e caveis egredientibus solet.*<sup>29</sup> Perhaps the lions were released in this manner because the cages underneath the arena floor of the Colosseum were already full with numerous other animals recorded for Probus' spectacle. Another, but less likely explanation, is that the maned lions had only barely arrived in time for this event, therefore leaving no time for them to be transferred from their travelling boxes to the Colosseum.

Although the subterranean passage leading north from the Colosseum, previously identified as a route by which animals entered the arena, has now been identified as a private entrance corridor built by Commodus, it is indeed plausible



that a passage did in fact link the *Ludus Matutinus* with the Colosseum.<sup>30</sup> A corridor branching off to the south from that linking the *Ludus Magnus* and the Colosseum may have led to the *Ludus Matutinus*, which was located to the south of the larger training-school.<sup>31</sup> If all three of these buildings were indeed connected, movement through these passages would obviously have to be closely supervised, so as to prevent gladiators and wild animals encountering each other en route to the Colosseum.

The usual arrangement for protecting spectators from animals in amphitheatres such as the Colosseum was to have a wooden fence with netting set approximately two metres in front of the podium wall. The fences proper are thought to have been approximately two metres high, and the netting above was around 1.5 to 2 metres in height. The stone sockets for the posts of this fence in the Colosseum are approximately four metres in front of the podium wall and a distance of 4.75 metres apart.<sup>32</sup> Apart from its protective function, the fence also kept animals from huddling against the podium wall, where they would be invisible to many of the spectators above. Arena attendants patrolling the space between the two barriers could force animals onto the arena floor by poking torches and other weapons through the netting.<sup>33</sup>

Similar fencing arrangements have been found in the amphitheatres of Pozzuoli, Trier, and Syracuse.<sup>34</sup> The ditches found outside of the fences in the last two amphitheatres however, were not, as commonly suggested, used as a moat to further hinder escaping animals, but were merely drains for blood and rain-water. The only known moat used at animal *spectacula* was the example dug by Caesar in the Circus Maximus.<sup>35</sup>

Some scholarly dispute has arisen over Calpurnius' description of an animal safety device consisting of a fence topped by a gilded net suspended from elephant tusks.<sup>36</sup> Some scholars have surmised that this apparatus was the fence in front of the podium wall in the Colosseum, while others, such as Scobie, have suggested that it

was part of Nero's wooden amphitheatre built in 57 AD.<sup>37</sup> Assuming that Calpurnius did in fact write under Nero, this fence may have originally been set up for his amphitheatre, which of course would not prevent it from later being copied in venues such as the Colosseum.

A further defence against unruly animals in the Colosseum may have been the twenty-four niches mounted around the podium wall, 1 metre deep and 1.9 metres high, from which archers could shoot at any animals attempting to escape over the fence into the crowd.<sup>38</sup> Golvin and Nibby, because of the drains found in the bottom of these niches, consider them to have contained seats for elite members of the audience rather than archers, but their relatively small size favours their use as sentinel-posts.<sup>39</sup> In addition, seats on top of the podium wall would presumably offer a better view of the spectacles than those situated within it, which makes it questionable whether twenty-four of the latter seats would have been provided in the first place.

In order to hinder any animals from leaping into the crowd at a given *spectaculum*, the podium walls and *baltei* (ornamental capstones) in Roman amphitheatres averaged a total of three metres in height: although the *balteus* of the Colosseum is no longer extant, the podium wall underneath appears to have originally been approximately 3.6 metres high. The animal-related structures at other Roman amphitheatres were similar to those found at the Colosseum, although not always elaborated to the same degree. Regularly-spaced holes found in the *baltei* of several amphitheatres, such as those of Alba Fucens and Merida, indicate that posts with netting similar to that described by Calpurnius Siculus were often used to further reinforce these walls at various amphitheatres.<sup>40</sup>

The provision and arrangement of cages varied depending upon the particular amphitheatre. Simpler venues possessed small cages with single openings leading either directly onto the arena floor, as at Castra Albana, or onto a corridor giving access to the arena. The latter cages were often placed in pairs flanking the access

corridors on the long axis of the amphitheatre.<sup>41</sup> The more 'sophisticated' of these cages possessed two openings, one giving access to the arena floor, and the other to an axial corridor.<sup>42</sup> More elaborate amphitheatres such as the Colosseum possessed a number of cages in their basements, from which the animals could be conveyed to the arena floor by lifts located there. One advantage of this system, for amphitheatres which possessed separate entrances to their basements, was that animals could be transported into the amphitheatre even while a show was going on up above.<sup>43</sup>

The larger amphitheatres in cities and towns outside Rome generally also followed the arrangements made in the Colosseum for animals to be used in the *spectacula*. At Pozzuoli, for example, a large trench in the centre of the arena floor, which could be covered over with wooden flooring as need required, gave access to the central passageway of the amphitheatre's basement (Fig. 46). Arranged around the perimeter of the arena floor were numerous rectangular openings, also with removable lids, which gave light to the cages in the substructure of the amphitheatre.<sup>44</sup>

The cages themselves, built on two superimposed levels under the perimeter of the arena floor, were linked to the central passageway and vestibule of the amphitheatre basement by a radial passageway. At least forty cages, with corresponding trap-doors in front giving access to the arena floor, were situated on the upper gallery, while forty were located on the lower. Wooden planks stored against the wall of the radial passageway could be used as ramps for the animals exiting the upper cages. These animals were presumably transported in wheeled cages and hoisted to the arena floor using equipment similar to that found in the Colosseum.<sup>45</sup>

*Spectaculum 'Props':*

To judge by the literary evidence, larger venues used for various animal *spectacula* were sometimes chosen or altered in order to approximate a natural woodland setting as closely as possible. As early as the late Republic, Hortensius is said to have staged for his guests on the wooded grounds of his *therotrophium* a 'reenactment' of Orpheus charming the beasts, a spectacle which Varro compared to the contemporary spectacles *sine Africaniis bestiis* staged by the aediles in the Circus Maximus. Evidently the latter spectacles involved some sort of fake shrubbery installed in the Circus to make the animals events there seem more natural and realistic.<sup>46</sup>

Martial records another reeneactment of the Orpheus myth, involving far more dangerous animals, which took place in the Colosseum in AD 80. This particular *spectaculum* appears to have involved moveable fake rocks and trees, which were evidently both raised and maneuvered by some sort of machinery in the basement of the Colosseum: according to Martial, *...repserunt scopuli mirandaque silva cucurrit*.<sup>47</sup> As Aymard states, because of the apparent realism of the fake scenery employed in such events, it is often difficult to determine with certainty whether so-called 'hunt-mosaics' actually represent hunts in the wild or merely *venationes* with natural props in the arena.<sup>48</sup>

Even more elaborate props for a *venatio* are recorded in a poem written by Calpurnius Siculus, commonly thought to have been composed during Nero's reign:

Oh, how we quaked, whenever we saw the arena part asunder and its soil upturned and beasts plunge out from the chasm cleft in the earth; yet often from those same rifts the golden arbutus sprang amid a sudden fountain spray (of saffron).<sup>49</sup>

Like the Orpheus *spectaculum* described by Martial, this event also featured artificial trees raised from the substructure of the arena where it was staged. These trees were evidently painted gold, or loaded with fake golden apples, to create the supposed appearance of the Garden of the Hesperides for the audience, much as the tree-props

mentioned by Martial are said to have done. Various unspecified *silvestria monstra*, as well as caves and even a pit or chasm, were also included in the spectacle described by Calpurnius so as to heighten the illusion of nature. As an even more elaborate touch, some sort of artificial lake or pool, was evidently also included, as suggested by Calpurnius' mention of the participation of seals and hippopotami in the *venatio*.<sup>50</sup>

Two such 'silvan' *spectacula* are also recorded in the SHA. The first of these events, said to have been staged by the future Gordian I during his term as praetor under Septimius Severus, also involved the provision of an artificial forest in an unnamed location, filled with large numbers of such animals as antelopes, wild boars, ostriches, and wild asses. The more dangerous animals were evidently killed in a *venatio*, while the more placid specimens which survived were left for members of the audience to take. The text does not specify how this was achieved, but presumably spectators were allowed to descend to the arena floor and attempt to capture whatever animals they wished.<sup>51</sup>

A similar, but even more elaborate *spectaculum* was said to have been staged by Probus some eighty years later. In this case the event took place in the Circus Maximus, where soldiers planted full-grown trees they had earlier uprooted from their original locations, as well as other greenery, in order to create the perfect illusion of a forest. Into this area were released thousands of animals, such as deer, boars, wild sheep, and ostriches, which the Roman populace were then allowed to take for themselves, as in Gordian's spectacle. For an event involving so many animals the Circus Maximus, with an area of c. 44,000 square metres, would have been a far more plausible venue than the Colosseum, with an area of only c. 3500 square metres.<sup>52</sup>

On occasion, other special structures could be built in the amphitheatres to increase the excitement of the various *munera*, including the beast-hunts. Various types of evidence suggest that small bridges or 'pulpits' were sometimes placed in the arena for the combatants to clamber over or hide behind. A Pompeiian inscription of

the late first century BC mentions *pontarii* as taking part in the games put on by Aulus Claudius Flaccus to celebrate his first duumvirate.<sup>53</sup> Although it was previously thought that these individuals might have been the attendants responsible for pushing animals up the gangplanks in the amphitheatre, the *pontarii* rather appear to have been combatants trained to fight on bridges or gangplanks, possibly above water, in the arena.<sup>54</sup> A passage from the *Passio Perpetuae et Felicitatis* confirms that such structures were indeed sometimes placed in the arena, while different pieces of art depict both gladiators and a lion attacking a condemned criminal on what appear to be bridges.<sup>55</sup>

An arena scene from a diptych of Areobindus shows an individual standing on a bridge-like structure, with an angry bear beneath.<sup>56</sup> In this instance it is difficult to determine whether or not the individual in question is a condemned criminal or performer, since the other men depicted in the scene all appear to be the latter: the fact that the individual on the bridge, unlike the others, does not appear to be wearing any costume, may suggest that he is an arena acrobat. Although none of the artwork just discussed definitely depicts *venatores*, it seems reasonable to assume that they too on occasion fought on bridges, just as their gladiatorial counterparts.

Among other structural additions to the *venationes* were the *portae posticae* added to the Colosseum and other amphitheatres. These gates, which the *venatores* could use to hide behind or sally forth from, were evidently situated around the arena to add excitement to the beast-hunts. An inscription of 364-75 from Velitrae records the restoration of the amphitheatre, including *posticae*, by the *principalis curiae* Lollius Cyrius.<sup>57</sup> Another inscription from Rome records the building of such structures in the Colosseum between 425 and 450.<sup>58</sup> The fact that the earliest known mention of *posticae* comes from the reign of Probus suggests that they may have been a relatively late addition to add excitement to the *venationes*, perhaps meant to compensate for the declining number and variety of animals used in the beast-hunts of the later empire.

The *portae posticae* could give access both to the annular passages surrounding the arena and the animal-cages that often opened onto the latter.<sup>59</sup> This could perhaps explain a curious remark by the author of the *SHA* regarding a *venatio* given in the Colosseum by Probus (see page 196). The passage in question states that 100 lions involved in this spectacle were slaughtered as they hesitatingly came forth from these gates (*e posticis*).<sup>60</sup> Evidently on this occasion the animals were not released and brought up from their cages underneath the arena floor, but instead were released into the annular passage between the podium wall and fence, from which they made their way into the arena through the *posticae*.

The structure of such gates could evidently vary from site to site. The *portae posticae* of Lepcis Magna's amphitheatre, for example, consisted entirely of a panel grill that was slid vertically into position.<sup>61</sup> The bottom section of a diptych of Anastasius depicts what has been variously interpreted as two such gates or 'refuge' niches, although the form of the gates could presumably be similar in either case. Two arena attendants, one on either side of the diptych scene, peer out from openings in what appears to be a podium wall. The handles of the doors to these openings consist of a vertical rope strung between two rings. Each door also has a panel grill, in order that someone behind the door might still be able to see the action in the arena. Similar grilled doors are depicted in the bear and lion-hunt scenes from one of the early sixth-century diptychs of Areobindus.<sup>62</sup> In this case the doors are not likely to belong to refuge niches, since in several instances the lions and bears appear to be coming out from behind them rather than the *venatores*. The performers depicted emerging from behind exactly the same sort of door on another diptych of Areobindus suggest that they, as well as the animals, could also sally forth from the *portae posticae* during a spectacle.<sup>63</sup>

*Smaller Centres in the Western Empire:*

Although smaller towns like Pompeii often held gladiatorial games in their *fora*, for safety reasons full-scale animal *spectacula* were not held in such venues. On one occasion the Pompeiian duovir Flaccus staged a gladiatorial combat in the forum, but only allowed bull-fighting for additional entertainment. Any other dangerous animals brought into the forum were safely displayed in cages.<sup>64</sup> A passage from Oppian implies that animal *spectacula* continued to be staged in the *fora* of various small towns by groups of travelling entertainers as late as the third century, but as in the case of Pompeii, they were decidedly modest in scale. Oppian describes a combat between a single *venator* and a single leopard in the agora of an unnamed town. As Jennison notes, the groups of entertainers putting on such shows were likely often hired by local magistrates responsible for staging shows in their own communities, but probably also travelled from town to town staging their own impromptu exhibitions for profit.<sup>65</sup>

Because of the disadvantages of using the forum for various *munera*, most small towns built their own modest amphitheatres so that the populace could enjoy *venationes* and other spectacles in relative safety.<sup>66</sup> A minimum height of fencing would have been necessary for any such arena, so as to prevent any of the more agile carnivores, such as tigers and leopards, from jumping into the crowd (both tigers and leopards can jump almost four metres high). Jennison suggests that a c. two metre high wooden fence, surmounted by netting to a height of approximately 3.5 metres, would adequately fulfill this safety purpose.<sup>67</sup>

The standard means of bringing animals onto the arena floor in smaller venues appears to have been the same as that used originally in the Colosseum: animals would be carried into the amphitheatre behind the podium wall in their cages and then released onto the arena floor through openings in the latter structure. The amphitheatre at Trier, for example, possessed ten openings in its



podium wall giving direct access onto the arena floor from the animal cages set behind it.<sup>68</sup> Apuleius refers to animals, intended to execute a condemned criminal, being brought in cages into Corinth's theatre, which, as we shall shortly see, was used as a venue for the *venationes*.<sup>69</sup>

Pompeii, like many other smaller centres, does not appear to have possessed its own animal-enclosure for beast-hunts and displays: towns like Pompeii generally had their amphitheatres located on the edge of town so that gladiators and wild animals could be brought in for the shows without having to be quartered in the town for any length of time beforehand.<sup>70</sup> According to Thédenat, Pompeii's enclosure may have been the small building depicted beside the amphitheatre in the famous painting of the riot which occurred there in 59, but there is no supporting evidence for this claim. If a substantial *vivarium* had existed in the city to accommodate animals for an extended period of time, one would have expected to have found at least some such faunal remains in the area.<sup>71</sup>

Although animals like tigers and lions were depicted in paintings on the podium wall of Pompeii's amphitheatre, it is uncertain whether or not such large carnivores were ever actually displayed there. No firm evidence exists of a fence surmounting the 2.18 metre high podium wall, which would have been necessary to contain such animals.<sup>72</sup> Traces of iron, however, were found between the cornice blocks atop the amphitheatre wall, which may have originally belonged to an iron grating surmounting the wall.<sup>73</sup> If large and dangerous animals were exhibited in amphitheatres such as Pompeii's, temporary cages must have been set up on the arena floor in order to keep them safely segregated from the audience.<sup>74</sup>

A potential hazard in the design of Pompeii's amphitheatre, which appears to have been remedied in later amphitheatres of the same size, was that spectators and performers, in certain cases, had to share the same main entrances.<sup>75</sup> One can see how, if the entrances of the two groups were not carefully timed and regulated, a potentially disastrous situation could arise. The limitations of its amphitheatre may

therefore have been one reason why Pompeii's animal *spectacula* were apparently somewhat limited in scale.

Other evidence, however, suggests that even minor centres could have amphitheatres adapted for the *spectacula*, a measure of their popularity in the empire. Such is the case of the amphitheatre of Cagliari in Sardinia (Fig. 47). While the principal entrance to the amphitheatre lay on its south side, a group of six rooms on the north side was reserved for wild animals and tools used in the shows. Ten small chambers located behind the entrances from the amphitheatre's lower passage to the arena floor appear to have been used as cages for the animals who were due to make an imminent performance. A pair of wall-rings in each chamber with rope passing through them was evidently employed as a pulley system to allow the arena attendants to open their doors in safety. The chamber doors, when opened, would close off the section of corridor that the attendant was standing in, while a barrier placed at the other end of the corridor would leave the animal no option but to exit it onto the arena floor.<sup>76</sup>

#### *The Eastern Empire:*

In the Greek east, specialized venues did not generally have to be built for the *venationes* and animal displays, because of the existing theatres that could be modified for this purpose.<sup>77</sup> As early as the first century AD, theatre orchestras began to be either sunk into the ground or have a high wall built around them in order to prevent any wayward gladiators or animals from escaping into the crowd. In the later empire stone seating was added to the rounded ends of some stadia to convert them into amphitheatres for such events.<sup>78</sup> The auxiliary structures of theatres could also be converted for animal *spectacula*: in the Roman period, the basement of the stage-building of Phthiotic Thebes' theatre was evidently converted to house animals.<sup>79</sup>

Theatres such as those found in Miletus and Magnesia have square niches cut into their podium walls, presumably for *venatores* to seek refuge in during combat.<sup>80</sup> A number of late antique ivory diptychs attest to the existence of such 'refuges', in particular that of the consul Anastasius made in 517. The spectacle depicted on the diptych includes what appear to be two brick or masonry refuges, each with its own 'doorman' ready to close the door against any onrushing animal.<sup>81</sup>

An early fifth century diptych shows the difference between the refuges and the *portae posticae* in the arena: three of the doors depicted in the scene have inset grills, like those depicted on several mosaics, while the fourth, from which an individual is emerging, has what appears to be a *venator* painted or carved on its front.<sup>82</sup> The latter door may have been decorated in such a fashion for the audience, showing what could be hiding behind it, in order to differentiate the refuge from the other gates in the arena.

The theatre at Corinth in particular appears to have been a popular venue for gladiatorial combats and *venationes* in the Greek east, perhaps because of the Italian settlers who made up the bulk of population of the Roman colony founded there by Julius Caesar.<sup>83</sup> It was evidently used for such events until at least the third century AD.<sup>84</sup> Both literary and artistic evidence attests to the staging of *venationes* at the theatre. One of the fictional spectacles described by Apuleius, including gladiators, *venationes*, and the public execution of criminals, is set in that venue.<sup>85</sup> Early third-century paintings on the inner wall of the theatre included scenes of *venatores* fighting lions, as well as another individual pole-vaulting over an onrushing leopard.<sup>86</sup>

The alterations made to the theatre of Corinth in order to accommodate Roman spectacles were similar to those undertaken at other theatres in the Greek east. Such venues were converted for gladiatorial and animal *spectacula* by removing the lower seats, walling up the stage, and extending the resulting podium wall across the *parodoi* (side exits), thereby creating an enclosed ring for such events. The height of

the podium walls was also raised in order to increase spectator security.<sup>87</sup> At Corinth, the first step in the alteration of the podium was the removal of the ten lowest rows of seats in the original theatre to make more room for the combats. After this area had been excavated, a natural semi-circular wall of approximately 1.5 metres in height was left surrounding the orchestra floor, topped by blocks of masonry. A row of cornice blocks, reaching a height of some 3.5 metres above the orchestra floor, likely topped by iron grating as in Pompeii's amphitheatre, completed the wall. Three small circular chambers cut into this wall were likely used as refuges for hard-pressed *venatores*: the central chamber could be exited by a small stairway leading to the cavea.<sup>88</sup>

Evidence of fencing with nets has been found in a number of other Greek theatres employed on occasion for the *venationes* and animal displays.<sup>89</sup> Regularly-spaced post-holes found in front of the *proedria* seats surrounding the orchestra of the theatre of Dionysus in Athens were evidently used for a fence of some sort, as were those found on top of the theatre's podium wall in Philippi. The podium wall at Philippi, along with the posts and netting in front, would have created a barrier some 3.7 metres in height.<sup>90</sup> Evidence for a net of some sort can also be found at the theatre of Thasos. A certain Heragoras is recorded as having built a balustrade with grating in the building at the end of the second century. The slabs of the balustrade are 1.71 metres in height, but metal brackets on the backs of the slabs suggest that a fence with netting would have risen even higher above this barrier.<sup>91</sup>

Stadia in a relatively unaltered form were also clearly used as venues for *venationes* and animal displays in the Greek world. The larger oblong-shaped space of a stadium, like that of a Roman circus, was more suitable than the relatively small orchestra of a theatre for *spectacula* involving a large number of animals.<sup>92</sup> Such a venue was also ideal for the relatively common public executions of criminals by means of bulls or other large animals: Eusebius explicitly states that Polycarp would

have been thrown to a lion in Smyrna's stadium if the *venationes* had not been currently out of season.<sup>93</sup>

Epigraphic evidence also indicates that stadia were used for animal *spectacula*. Three inscriptions from the Greek east record *venatores* who fought ἐν σταδίοις, and the bull from Kos named Σταδιάρχης apparently performed in such venues as well. The stadium in Aphrodisias was also in all likelihood the site of the performances of the ταυροκαθάπτοι owned by the high priest of the imperial cult there in around 100 AD. The performances of these specialists and their bulls would require far more space than the orchestra of a theatre could provide, as well as protected seating for the audience: both of these stipulations would have been fulfilled by Aphrodisias' stadium.<sup>94</sup>

The stadia at Perge and Aphrodisias give some indication of the architectural modifications that may have made to stadia in order to accomodate *venationes* and other animal events. Cuttings in the second century podium wall at Perge were evidently used originally to fix the tension ropes of the netting that ran along the podium. The first century stadium at Aphrodisias has similar cuttings in its podium wall, presumably for the same purpose. The latter stadium also has square niches cut into its podium wall, similar to those found in various Greek theatres.<sup>95</sup>

Although Welch points out that well-preserved podium walls are extremely rare in extant Greek stadia, making it difficult to make generalizations about them, many such venues holding animal *spectacula* may have at one time possessed such netting: as we have seen, venues ranging from the Colosseum to Greek theatres did.<sup>96</sup> Welch surmises that the c. 1 metre high podium walls found in many Greek stadia of the Roman period may have also been a protective measure against animals leaping into the crowd during *venationes*, but on its own this barrier would have been insufficient for more agile animals like large felines.<sup>97</sup>

*Venationes* were also staged in Athens' stadia. Attested events such as the *taurokathapsia* of 36/37 were in all likelihood staged in the old Panathenaic stadium

of the city, since the theatre of Dionysus was not modified for Roman spectacles until Nero's reign. The SHA explicitly records that Hadrian staged a massive *venatio* of 1000 animals at this venue: despite the dubious value of this source, the recording of a specific location for the spectacle may indicate its authenticity.<sup>98</sup> The new Panathenaic stadium built by Herodes Atticus shortly thereafter also played host to such events: in addition to its parapet and podium walls each over one metre in height, the latter also had cuttings in it for a fence or netting, similar to those found in the stadium at Perge.<sup>99</sup>

Apart from modifications made to preexisting venues, a number of 'mixed theatres', modified for both gladiatorial and animal combats, were constructed in the Greek east during the Roman period. The theatre at Stobi (in present-day Macedonia), built in the early second century AD, is typical of such structures. The design of Stobi's cavea and orchestra is typical of Greek theatres, but no stage exists in the complex, leaving room for various 'Roman-style' combats, which were evidently more popular than dramatic performances in Stobi.<sup>100</sup> *Venationes* are known to have been staged at Stobi as late as c. AD 300.<sup>101</sup>

The podium wall of the theatre is only 1.6 metres high and 0.8 metres wide, but three rows of cuttings found in of the top of the wall and the first row of seats indicate that additional measures were taken to protect against wild animals in the orchestra. The first row of rectangular cuttings held the posts of a fence with netting surrounding the orchestra, while the second, as shown by one still *in situ*, contained iron rings for guy-ropes securing the posts in position (Fig. 48).<sup>102</sup> These ropes were apparently not strong enough: the third series of cuttings, which was obviously added after the other two, was evidently designed to hold additional guy-ropes for the fence-posts. Due to problems of visibility during non-violent events, this fence and netting was not intended to be a permanent addition to the theatre, but it, along with the guy-ropes, could be taken down and erected as need required.<sup>103</sup> After a severe earthquake in the third century, perhaps at a time when dramatic performances

were no longer staged in the theatre, the fence and guy-ropes were replaced with a masonry wall on top of the podium, creating a new barrier some 3.6 metres in height.<sup>104</sup>

Two inscriptions from the Greek east mention other animal-related structures evidently built for the ταυρομάχιαι or some similar event. A text incised in Oinoanda during the reign of Septimius Severus records the construction of a βουκονιστήριον beside the city's agora.<sup>105</sup> Although this term evidently means something like 'bullring' there appears to be no reason *a priori* why it could not have been used for other types of animal combats as well. Another inscription found near the city gate of Pindara sheds some light on the type of structures built for the ταυροβόλια, and perhaps, other types of animal *spectacula* as well.<sup>106</sup> The inscription records the building of χαμάραι, θυρώματα, an ἐκφοῦγιν, and a καθίστρα for the ταυροβόλιον by Evenos, the local priest of Ares. According to Robert the χαμάραι were likely the vaulted chambers in which the bulls were housed prior to their appearance in the spectacles, while the ἐκφοῦγιν may have been either some sort of corral connecting the χαμαραι and the arena, or an alcove within the arena in which hard-pressed *venatores* could temporarily gain a respite from combat. The θυρώματα were likely the actual gates put on the passageway(s) linking the arena with the bull enclosures below. Finally, although the word καθίστρα is unusual, it likely refers to the seats in the arena provided for the spectators.<sup>107</sup>

The location of this inscription beside one of Pindara's city gates may be significant: perhaps at one time where the inscription was placed, an enclosure was attached to the city's wall, similar to the more famous *vivarium* in Rome. Like the βουκονιστήριον at Oinoanda, the structures built in Pindara could have also conceivably been used for animal *spectacula* not involving bulls. However, the fact that the Pindara inscription specifically mentions that Evenos undertook his building program for the ταυροβόλιον suggests that bulls perhaps were the only animals Pindara and other cities known to have staged ταυροβόλια could afford.

*Marine Modifications:*

Apart from the modifications made to theatres, stadia, and amphitheatres for 'terrestrial' animal *spectacula*, other alterations were also necessary for various marine events, some of which likely also included animals. Although, as we have seen, aquatic performances involving animals were staged in Rome as early as the reign of Augustus, such spectacles appear to have become particularly popular in the later empire.<sup>108</sup> Unfortunately we have no archaeological evidence from Rome of what modifications were made to the theatre(s) there to allow such aquatic spectacles.<sup>109</sup>

Excavations performed on other theatres throughout the empire nevertheless give us some idea of how these venues might have been adapted for such events. One of the earliest known examples, perhaps acting as a prototype for later developments elsewhere, comes from the theatre of Daphne near Antioch, which was built in the late first century AD. A four metre long pipe was extended from a cistern near the theatre to a hole, 0.40 metres in diameter, situated in the middle of its orchestra. Two sluice-gates, the second of which gave access to the *euripus* surrounding the orchestra, easily controlled the flow of water into and out of the theatre.<sup>110</sup>

Other theatres throughout the empire known to have staged animal *spectacula* underwent similar modifications, albeit at a later date. In its last phase of construction, dated by different scholars from the third to sixth century, the inner face of the podium wall of the theatre of Dionysus in Athens was reinforced with a half-metre thick facing of stone covered with stucco, presumably to make the orchestra water-tight. At the same time the *euripus* running inside this wall was filled up with masonry to the height of the orchestra, apart from a terracotta pipe at its base which allowed water drainage. Another rectangular pipe, connecting with the orchestra at its southeastern corner, connected the theatre with the hydraulic system on the southern slope of the Acropolis.<sup>111</sup>



Another theatre in Greece that underwent similar renovations was that at Corinth. This theatre which, as we have seen, was regularly used for *venationes*, was given a new wall surrounding the orchestra in approximately 300 AD. This wall consisted of marble blocks approximately 13 centimetres thick, reinforced by a layer of *opus caementicum* 30 centimetres thick. At the same time, the orchestra was repaved with a water-tight layer of concrete, and a cistern was built east of the stage, from which a conduit led to the orchestra.<sup>112</sup>

The pools created in flooded theatre orchestras would have been, on average, 20 to 25 metres in diameter and approximately one metre in depth.<sup>113</sup> Although Traversari argues that the primary spectacle staged in such altered theatres was that of the 'aquatic mimes', thoroughly denounced by such authors as John Chrysostom, this would not preclude the use of such venues for small-scale *venationes* and animal displays as well.<sup>114</sup> In addition to combats between various marine animals, the relative shallowness of these basins would theoretically allow *venatores* themselves to wade in and do battle with such creatures.

Larger amphitheatres throughout the empire could also be flooded for animal *spectacula*. Unfortunately, in the case of the Colosseum, much of the equipment used for the flooding of the amphitheatre was obliterated when its basement was equipped with new and complicated substructures, such as animal cages, by Domitian.<sup>115</sup> However, the early Colosseum, like its predecessor, the artificial lake of Nero's Domus Aurea estate, presumably used the same channel leading from the Aqua Claudia for its water needs.<sup>116</sup> Although the remains of five channels, presumably for drainage, have been found in the basement of the Colosseum, it is unlikely that the entire area of the basement as now preserved was flooded for aquatic spectacles. Such an undertaking would have required almost 18,000 cubic metres of water, and the periphery of the basin thus created would not have been easily visible to the spectators above.<sup>117</sup>

Coleman suggests instead that a substantially shallower basin in the centre of the arena floor could have been used for aquatic *spectacula* in the Colosseum prior to Domitian's rebuilding of it. If this basin occupied most of the arena floor, it would be large enough to accomodate lavish aquatic spectacles of the type recorded by the sources.<sup>118</sup> The basins found in the arena floors of amphitheatres at Mérida and Verona, both of which are pre-Flavian, give some idea of what the Colosseum's basin may have looked like, and perhaps served as a prototype for the latter (Fig. 49). The basins were both attached to aqueducts and drainage channels, and could be covered over by wooden flooring when not in use. The cruciform basin of the amphitheatre at Mérida had an area of approximately 750 square metres, while that at Verona was approximately 300 metres in area. Both basins were between 1 and 2 metres deep. Although neither would be large enough to accommodate *naumachiae* on the scale of those described by the sources, smaller displays of mimes or animals, as well as *venationes*, could fit without difficulty into such basins.<sup>119</sup>

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Notes:

<sup>1</sup> Scobie (1988) 210. It is not my intention in this section to exhaustively describe all of the various venues throughout the empire which were adapted for animal *spectacula*, but only to provide a general discussion of the types of modifications that were made to amphitheatres and other structures for these events: for a recent, more detailed discussion of individual amphitheatres, see D.L. Bomgardner, The Story of the Roman Amphitheatre (London: 2000).

<sup>2</sup> Scobie (1988) 212.

<sup>3</sup> Golvin (1988) 63: Ville (1981) 382-83.

<sup>4</sup> Livy 41, 27, 6: Humphrey (1986) 71.

<sup>5</sup> Golvin (1988) 21, 62-63.

<sup>6</sup> Coleman (1990) 52.

<sup>7</sup> Pliny, NH, 8, 7, 20-21: Platner and Ashby (1929) 115.

<sup>8</sup> Suetonius, *Caesar*, 39: Dionysius 3, 68, 1-4: Golvin (1988) 50: Platner and Ashby (1929) 115: Scobie (1988) 211. Dionysius' description of Caesar's spectacle suggests that the moat was located on the outside rather than the inside of the barrier surrounding the circus floor. The thirsty bulls which participated on this occasion would otherwise have simply drunk water out of the ditch rather than perform for the crowd: see Jennison (1937) 156. Caesar's moat was ultimately filled in by Nero in 63, when reserved seating for the *equites* was installed in its place. Since the moat was originally built to protect against rampaging elephants, the removal of this barrier by Nero may be an indication that elephants had ceased to be important participants in the animal spectacles of the early empire: see Tacitus, *Annales*, 15, 32, 2: Jennison

(1937) 156: Humphrey (1986) 175.

<sup>9</sup> Scobie (1988) 196.

<sup>10</sup> Dio, 77, 1, 4: Coleman (1990) 52: Humphrey (1986) 115-16, 121, 173, fig. 77.

<sup>11</sup> Claudian, *De Sexto Consulatu Honorii*, 618-20: Jennison (1937) 155.

<sup>12</sup> Tortorella (1981) 75-77: Humphrey (1986) 182-86, 293.

<sup>13</sup> Humphrey (1986) 182. Tortorella [(1981) 78-80] in fact suggests that the plaques may depict a *venatio* staged in the Circus Maximus by Claudius, although Humphrey rightly calls this particular identification into question.

<sup>14</sup> Tortorella (1981) 77, 99, fig. 41.

<sup>15</sup> Humphrey (1986) 186, 653, n. 20: Tortorella (1981) 77.

<sup>16</sup> Juvenal 6, 590: Servius, *On Aeneid* 9, 702: Humphrey (1986) 266. The inclusion of these towers supports a relatively early date for the *venatio* plaques, since such depictions are found no later than the first century AD.

<sup>17</sup> Humphrey (1986) *Ibid.* Other large cities under the empire may have staged animal *spectacula* in their own circuses. Several circus mosaics, such as those found at Gafsa and Barcelona, depicting statues of lions and bulls on the *euripus*, seem to imply that *venationes* and animal displays, as well as chariot-races, were presented there. Assuming that circuses in cities such as these were occasionally used for beast-hunts or spectacles, it must nevertheless be remembered that at least some provincial circus mosaics, like that from Piazza Armerina, actually depict the Circus Maximus in Rome, rather than any local venues, and therefore cannot be used as evidence concerning where local animal *spectacula* were staged: see Monteagudo (1991) 258.

<sup>18</sup> Although the Forum Romanum was the site of gladiatorial spectacles as early as the third century BC, no recorded *venatio* was staged there prior to that of Caesar: see Welch (1994) 69-72.

<sup>19</sup> Dio 43, 22, 3: Golvin (1988) 48-49. It has been suggested that the substructures in the forum included elevators and winches for the transport of animals etc. to ground level: if so, they likely formed a precedent for the elaborate arrangements in the basements of later amphitheatres like that at Pozzuoli: see Welch (1994) 71, n. 33.

<sup>20</sup> Jennison (1976) 155.

<sup>21</sup> For the games of 2 BC see Dio, 55, 10, 8; Strabo, 17, 1 44; Coleman (1993) 56: For the games of 80 A.D. see Martial, *De Spectaculis*, 28; Suetonius, *Titus*, 7, 3; Coleman (1993) 65-66.

<sup>22</sup> Suetonius, *Nero*, 12.

<sup>23</sup> Calpurnius Siculus, *Eclogues*, 5, 51-55, 69-72: Golvin (1988) 55-56.

<sup>24</sup> Golvin (1988) 183, 205. According to Bomgardner [(1984) 140-41], North African amphitheatres such as that at Carthage were only equipped with such substructures beginning in the second century: such venues were previously equipped with cages built into their podium walls.

<sup>25</sup> *SHA, Probus*, 19: Ammianus Marcellinus 28, 1, 10: Jennison (1937) 159-60. According to Loisel, the doors between the radial passageway and the arena floor in such venues as the Colosseum may have originally consisted of rotating *cochleae*, which, as we have seen, were later included in certain amphitheatre spectacles: see Loisel (1912) 117-18.

<sup>26</sup> Golvin (1988) 177: Pearson (1973) 115-16: Bomgardner (1984) 29-30.

<sup>27</sup> Jennison (1937) 160-61.

<sup>28</sup> Bomgardner (1984) 30.

<sup>29</sup> *SHA, Probus*, 19: Jennison (1937) 93-94.

<sup>30</sup> Daremberg-Saglio, "Venatio" 701: Lanciani (1979) 385: Golvin (1988) 178. Bomgardner [(2000) 22] makes the same suggestion.

<sup>31</sup> For the passage in question see Golvin (1988) pl. 37, F: For the location of the *Ludus Matutinus*, see the map between pages 340 and 341 in Darwall-Smith (1996), no. 33.

<sup>32</sup> Scobie (1988) 210: Golvin (1988) 317-18.

<sup>33</sup> Bomgardner (1984) 30.

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- <sup>34</sup> Scobie (1988) 210; Golvin (1988) 317-18; Bomgardner (2000) 86.
- <sup>35</sup> Scobie (1988) 211.
- <sup>36</sup> Calpurnius Siculus, *Eclogues*, 7, 50-56.
- <sup>37</sup> Platner and Ashby (1929) 116; Scobie (1988) 211-212.
- <sup>38</sup> Scobie (1988) 210-11; Bomgardner (2000) 21.
- <sup>39</sup> Golvin (1988) 176-77; Nibby (1839) 427.
- <sup>40</sup> Calpurnius Siculus, *Eclogues*, 7, 50-55; Golvin (1988) 314. Similar holes, presumably for protective fencing are also found in the *baltei* of theatres like Mytilene and Thasos: personal communication, Dr. H. Williams, Department of Classical, Near Eastern and Religious Studies, University of British Columbia.
- <sup>41</sup> Golvin (1988) 326-29: Examples of the latter type of cage-placement are found in the amphitheatres of Merida, Saintes, Pompeii, and Lambaesis.
- <sup>42</sup> Golvin (1988) 329.
- <sup>43</sup> Golvin (1988) 328, 330-33.
- <sup>44</sup> Golvin (1988) 182-83, 328, 331; Bomgardner (2000) 82.
- <sup>45</sup> Loisel (1912) 119-21; Bomgardner (1984) 33; Bomgardner (2000) 85; Golvin (1988) 183. In other amphitheatres with animal cages beneath the arena floor, the animals would be lifted to a point just underneath the podium wall, after which they would climb up and onto the arena floor through openings in the wall, similar to the means of animal-entrance used at more modest venues.
- <sup>46</sup> Varro, *De Re Rustica*, 3, 13, 2; Merten (1991) 155-56.
- <sup>47</sup> Martial, *De Spectaculis*, 21; Merten (1991) 156.
- <sup>48</sup> Aymard (1951) 191-93.
- <sup>49</sup> Calpurnius Siculus, *Eclogues*, 7, 69-72; Duff (1978) 283-85.
- <sup>50</sup> Calpurnius Siculus, *Eclogues*, 7, 64-68; Merten (1991) 156.
- <sup>51</sup> *SHA*, *Gordiani Tres*, 3, 6-8.
- <sup>52</sup> *SHA*, *Probus*, 19, 2-4; Merten (1991) 154, 157.
- <sup>53</sup> ILS 5053.
- <sup>54</sup> Bacchielli (1990) 770.
- <sup>55</sup> Bacchielli (1990) 769-72.
- <sup>56</sup> Volbach (1976) 33-34, n. 11.
- <sup>57</sup> ILS 5632.
- <sup>58</sup> ILS 5633; Fora (1996a) 89.
- <sup>59</sup> Golvin (1988) 319-20.
- <sup>60</sup> *SHA*, *Probus*, 19, 5-6.
- <sup>61</sup> Golvin (1988) 320.
- <sup>62</sup> Volbach (1976) 33, n. 8.
- <sup>63</sup> Volbach (1976) 33-34, n. 11.
- <sup>64</sup> ILS 5053; Scobie (1988) 198-99; Fora (1996b) 68-69, 122, n. 24. Flaccus' spectacle included the *pontarii* discussed above. For animal cages in the forum see Oppian, *Halieutica*, 2, 350-56.
- <sup>65</sup> Oppian, *Halieutica*, 2, 350-56; Jennison (1937) 154-55.
- <sup>66</sup> As early as 10 B.C. the *duovir* Flaccus staged a *venatio* in Pompeii's amphitheatre, subsequent to the event in the forum just mentioned: see ILS 5053; Ville (1981) 385-86.
- <sup>67</sup> Scobie (1988) 209-10; Jennison (1937) 155-56.
- <sup>68</sup> Loisel (1912) 118.
- <sup>69</sup> Apuleius, *Metamorphoses*, 10, 19-23; Capps Jr. (1949) 68.
- <sup>70</sup> Scobie (1988) 199-200.
- <sup>71</sup> Loisel (1912) 118-19. One must keep in mind, however, that animal remains from early excavations in Pompeii would not have been as carefully preserved as those found in the present day.
- <sup>72</sup> Scobie (1988) 209-10; Gebhard (1975) 45-46. Gebhard suggests that a separate fence with netting may have been set up behind the podium wall of Pompeii's amphitheatre to protect against agile felines, although no traces of such a fence have apparently

been found.

<sup>73</sup> Capps Jr. (1949) 66, n. 18.

<sup>74</sup> Jennison (1937) 155.

<sup>75</sup> Some spectators at Pompeii could have used the external staircases of the amphitheatre to reach their seats, but, in particular, those seated in the *ima cavea* on the east side of the amphitheatre would have had to use the lower entrances: Scobie (1988) 207-08.

<sup>76</sup> Levi (1942) 7.

<sup>77</sup> Welch (1998) 121.

<sup>78</sup> Welch (1998) 121-22.

<sup>79</sup> Blackman (1998-99) 71.

<sup>80</sup> Welch (1998) 125.

<sup>81</sup> Capps Jr. (1949) 66-67.

<sup>82</sup> Volbach (1976) 53, n. 59.

<sup>83</sup> Capps, Jr. (1949) 64-65.

<sup>84</sup> Capps Jr. (1949) 65-66; Bieber (1961) 252. It is possible that a natural depression outside of Corinth, later used as the site of the city's amphitheatre, was also employed in the colony's early history for spectacles including *venationes*. Dio Chrysostom [*Orationes*, 31, 121] writing around the end of the first century AD, and before the building of the amphitheatre, stated that the Corinthians watched gladiatorial games in a ravine outside the city: see Walbank (1997) 124-25.

<sup>85</sup> Apuleius, *Metamorphoses*, 10, 18-19, 23.

<sup>86</sup> Capps Jr. (1949) 67-70; Golvin (1988) 318.

<sup>87</sup> For other theatres modified in a similar fashion to Corinth, see Gebhard (1975) 61-63; Bieber (1961) 219-20. A number of these theatres, such as that at Sagalassus, have small (ie 0.87 metres high) doors leading into the orchestra from beneath the stage building, which were presumably intended for various animals being led in for combat.

<sup>88</sup> Capps Jr. (1949) 66-67; Gebhard (1975) 61-62. Bieber suggests that these alterations were undertaken in preparation for a visit of Caracalla (reigned 211-17). Similar modifications for violent combat were made to the odeum at Corinth in c. 225 AD: see Bieber (1961) 216, 222.

<sup>89</sup> Post-holes found in the theatres of Eretria and Argos suggest the existence of fences and netting to protect spectators against wild animals, but the evidence is not conclusive: see Gebhard (1975) 58-60.

<sup>90</sup> Gebhard (1975) 55, 60-61.

<sup>91</sup> Golvin (1988) 318; Gebhard (1975) 55.

<sup>92</sup> Welch (1998) 125-27.

<sup>93</sup> Eusebius, *Historia Ecclesiastica*, 5, 1; Welch (1998) 128-30.

<sup>94</sup> Welch (1998) 123; Robert (1971) 191-92, n. 191.

<sup>95</sup> Welch (1998) 125.

<sup>96</sup> Welch (1998) 123-25.

<sup>97</sup> Welch (1998) 123.

<sup>98</sup> *SHA, Hadrian*, 19, 3; Robert (1971) 116, n. 58; Welch (1998) 136-37.

<sup>99</sup> Welch (1998) 137.

<sup>100</sup> Gebhard (1975) 46-47.

<sup>101</sup> Bieber (1961) 217.

<sup>102</sup> Gebhard (1975) 47-52.

<sup>103</sup> Gebhard (1975) 52-55.

<sup>104</sup> Gebhard (1975) 47, n. 21.

<sup>105</sup> Robert (1971) 316, n. 4.

<sup>106</sup> Robert (1971) 316-17.

<sup>107</sup> Robert (1971) 317.

<sup>108</sup> Traversari (1960) 18-20.

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<sup>109</sup> Traversari (1960) 107-09.

<sup>110</sup> Traversari (1960) 23-27.

<sup>111</sup> Traversari (1960) 27-31: Given the third and fourth century dates assigned to similar renovations of the theatres at Argos, Syracuse, and Ostia, it is preferable, *contra* Traversari, in the absence of firmer evidence, to date the renovations of the theatre of Dionysus to this period rather than the fifth or sixth centuries AD: see Traversari (1960) 34-43.

<sup>112</sup> Traversari (1960) 31-34.

<sup>113</sup> Traversari (1960) 45.

<sup>114</sup> John Chrysostom, *Hom. in Matth.*, 7, 7: Traversari (1960) 109-10.

<sup>115</sup> Coleman (1993) 59: Darwall-Smith (1996) 81: The building of these substructures of course spelled an end for marine spectacles in the Colosseum.

<sup>116</sup> Coleman (1993) 58-59: Traversari (1960) 114.

<sup>117</sup> Coleman (1993) 60.

<sup>118</sup> Coleman (1993) 60.

<sup>119</sup> Coleman (1993) 57-58.

Appendix A:

The End of Animal Spectacula

Even under supposedly less 'bloodthirsty' Christian emperors the *venationes*, unlike their gladiatorial counterparts, were still popular throughout the Roman empire. Although Christian writers like John Chrysostom and Salvian attacked *venationes* in the fourth and fifth centuries, such events continued to be held at least as late as the sixth century, although they were banned on Sundays from 469 on.<sup>1</sup> Prudentius, in fact, recommends that, as the sole spectacle in the arena, beast-hunts would make an ideal replacment for gladiatorial combat.<sup>2</sup>

The negative attitude of early Christians towards wild animals may help to explain why *venationes*, in most of the empire, survived for over a century more than their gladiatorial counterparts. This Christian viewpoint can be largely explained by the attitude towards animals in the Bible. In the Old Testament, many beasts, such as swine, are deemed impure, while snakes and lions are linked to the Devil. Animals are similarly maligned in the New Testament: during his forty days in the wilderness, for example, Jesus is surrounded by wild beasts associated with Satan.<sup>3</sup> Because of this prejudice in the Bible, wild animals came to exemplify vice and danger to many Christians, which meant that these individuals would raise no serious objection to the staging of beast-hunts.<sup>4</sup>

*Venationes* not only continued to exist in the later empire, but may even have enjoyed increased popularity. The fourth century orator Libanius records that beast-hunts were so popular in Syria that people camped out on the streets the night beforehand in order to secure a good seat. In the same letter Libanius rates the popularity of the *venationes* in Antioch above both theatrical performances and horse-racing.<sup>5</sup> As Ville suggests, Roman audiences in the fourth century, eager for any type of spectacle, may have transferred much of their excitement previously

reserved for gladiatorial combat to *venationes*, once the former events fell into decline.<sup>6</sup>

Beast-hunts continued to be staged for over a century after gladiatorial combat had disappeared. Most of the latter events ceased at the beginning of the fifth century, while the last recorded *venatio* in Rome was held in 523, during the reign of the Ostrogothic king Theodoric: the last recorded ancient *venatio* in Constantinople's amphitheatre was staged in 537.<sup>7</sup> The recent discovery of leopard, bear, deer, wild boar, and ostrich bones in a fifth or sixth century drain and related robber-trench between the Colosseum and Meta Sudans independently confirms the continuation of beast-hunts in Rome at such a late date.<sup>8</sup> In addition, the poems of Luxorius bear ample testimony of the continued popularity of *venationes* in Carthage under Vandal rule.<sup>9</sup>

A fifth to sixth century serving-tray mold from El Djem also attests to the continuation of *venationes* in North Africa at a relatively late date (Fig. 50). In the centre of the mold is depicted an amphitheatre scene. At the top are shown five magistrates presiding over the events below, including three seated in a central tribunal. Immediately below them in the arena stand two *venatores*: one, armed with a spear, wears a tunic with an attached breastplate, as well as greaves on his legs. The clothing of the second hunter, however, cannot be determined, due to the fact that he is largely obscured by the rectangular shield held in front of him as protection from a neighbouring stag. Beside these figures, "...an enormous gooselike creature...", likely an ostrich, is depicted running to the left. Below the bird and *venatores* are shown two superimposed scenes of various animals fighting each other: in the upper register, a bear attacks a wild boar, while in the lower scene a lion is struggling with a bull. Around the preserved rim of the mold are depicted two more *venatores*, as well as lions, lionesses, and two palm leaves signifying victory in the arena.<sup>10</sup>

Taken as a whole, this object suggests that as late as the sixth century, *venationes* involving a variety of animals could still be staged even in El Djem, which



had been producing such events for centuries. Although the composition of the mold's central scene is strongly reminiscent of other late Roman artwork, including various consular diptychs and the Column of Theodosius, this does not necessarily indicate that it was manufactured prior to the Vandal conquest of North Africa: much of their art appears to have drawn heavily upon Roman antecedents.<sup>11</sup>

While a decisive factor in the demise of gladiatorial combat may have been the attitude of the powerful Christian church, economic and supply problems, as will be argued, appear to have played more of a role in the gradual disappearance of the *venationes*. Although the Christian emperor Anastasius appears to have attempted to ban beast-hunts in the eastern empire by a law passed in 498, this measure was evidently not effective: one of Justinian's *Novellae*, of 537, ordering consuls to provide *venationes* for the people, records *bestiis pugnantes homines et vincentes audacia*.<sup>12</sup>

More than one factor likely contributed to the disappearance of staged animal combats. Ward-Perkins has argued that one contributing factor in the demise of the *venationes*, in the western empire at least, may have been the disappearance of the consulate, and the associated consular games, in both halves of the empire in the sixth century. Since by this time the *venationes* appear to have mainly been staged at such events, their loss would have removed the opportunity for many *venationes*, even under otherwise ideal conditions, to be staged. An even more decisive factor in their demise, however, may have simply been the cost and difficulty in procuring and maintaining the many animals needed for such shows, particularly in the unsettled and financially-difficult sixth century. In particular, the establishment of the Vandal kingdom in North Africa, formerly one of the primary sources for animals used in the *venationes*, would have hindered the staging of such events.<sup>13</sup>

Even after the staging of the last *venationes*, interest in wild and exotic animals appears to have continued for a long period of time in the Byzantine empire. The bottom of the sixth-century Barberini diptych depicts various individuals

bringing animals to the emperor as tribute.<sup>14</sup> Exotic animals were still evidently kept at Constantinople at this time: amongst the exactions of the Avar leader Bayan from the Byzantine government was an elephant.<sup>15</sup> Even at a much later date, in the eleventh century, Constantine IX was sent a giraffe and an elephant as a present from the sultan of Egypt, while the Lombard crusaders who entered Constantinople in 1101 encountered a group of angry lions and leopards.<sup>16</sup> A hunt in the amphitheatre of Constantinople involving mounted hunters and their tame leopards is also attested for this same century. Even after the sack of the city by the Crusaders in 1204, some sort of *vivarium* for exotic animals may have continued to exist: in 1257, the emperor Michael Paleologus received a giraffe as a present from the king of Ethiopia.<sup>17</sup>

Interest in exotic beasts and various forms of animal-combat also continued in western Europe long after the dissolution of the Roman empire. Undoubtedly one of the most valued diplomatic gifts received by Charlemagne, for example, was a white elephant sent to him by the caliph of Baghdad in 802.<sup>18</sup> In terms of spectacles, one of the most popular medieval 'descendants' of the *venationes* in the west was the sport of bear-baiting.<sup>19</sup>

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Notes:

<sup>1</sup> John Chrysostom, *Hom. in Ep. I ad Cor.*, 12, 10; Salvian, *De Gubernatione Dei*, 6, 10; *Codex Just.* 3, 12, 9; *Novellae*, 105, 2; Wiedemann (1995a) 153-54, 157-58; Ville (1960) 318-19; see also Robert (1971) 329, n. 2.

<sup>2</sup> Prudentius, *Contra Symmachum*, 2, 1128; Ville (1960) 295.

<sup>3</sup> *Mark* 8, 28; Dinzelbacher (2000) 266-67. Evidence of the early Christian hostility towards lions in particular can be found on late antique sarcophagi depicting saints subduing lions: see Wiedemann (1995a) 154-55.

<sup>4</sup> Wiedemann (1995a) 154-55.

<sup>5</sup> Libanius, *Epistulae*, 1399; Toynbee (1996) 20.

<sup>6</sup> Ville (1960) 324-25.

<sup>7</sup> Cassiodorus, *Var.* 5, 42; Procopius, *Goth.* 3, 37, 4; Justinian, *Novellae*, 105, 1; Monteagudo (1991) 260-62; Ward-Perkins (1984) 111-12.

<sup>8</sup> De Grossi Mazzorin (1993) 309, 312-14.

<sup>9</sup> Bomgardner (1984) 86, 104. Even as late as the sixteenth century, the Sultan of Fez is

said to have staged a small-scale beast-hunt involving a bear and a lion: see Bomgardner (2000) 224.

<sup>10</sup> Ben Abed Ben Khader (1987) 224-27.

<sup>11</sup> Ben Abed Ben Khader (1987) 225.

<sup>12</sup> Joshua Stylites 34: Justinian, *Novellae*, 105, 1: Demandt (1989) 407: Ward-Perkins (1984) 113-14. Roueché [(1993) 77-78] argues that Anastasius' ban may have been misunderstood by ancient writers: what in fact the emperor banned was likely *condemnatio ad bestias* outside of Constantinople. This would explain the continuing existence of *venationes* even after Anastasius' supposed ban. Another explanation of Anastasius' ban is that it only applied to 'lethal' *venationes* in which the participating animals were killed: Bomgardner [(2000) 219] therefore argues that Anastasius was prompted by economic concerns, namely the desire to save money on the provision of animals, rather than any moral objections he had to such events. Ville [(1960) 332-33] argues that, before the supply of exotic animals completely dried up, *venationes* would have been far more economical than gladiatorial spectacles in the late empire: the limited numbers of animals available for a given show would have been less expensive than a troupe of gladiators, and many of these animals could be reused in a number of the acrobatic events popular in late antiquity.

<sup>13</sup> Ward-Perkins (1984) 115-16: cf. Bomgardner (1992) 162.

<sup>14</sup> Loisel (1912) 140, 142.

<sup>15</sup> Howarth (1994) 156-57.

<sup>16</sup> Loisel (1912) 142-43.

<sup>17</sup> Loisel (1912) 144. Wiedemann [(1995b) 155] suggests that one possible survival of the *venationes* in the former eastern empire are the yearly camel-fights held in Ephesus.

<sup>18</sup> Einhard, *Life of Charlemagne*, 16: The elephant in question survived for eight years after its arrival in Europe, until it died of a lung inflammation: see Dinzelbacher (2000) 327.

<sup>19</sup> Bomgardner (2000) 196, 218.

Appendix B:

Animal Distribution

*The Range of Ancient Animal Populations:*

Although the Roman *venationes* are commonly viewed as the precedent for such diverse events as medieval bear-baiting and Spanish bull-fighting, the ancient contests were different in at least one important respect from their more modern counterparts. Unlike, for example, bull-fights, which make use of locally-obtained animals, the Roman beast-hunts (at least in the larger centres) were commonly supplied with a wide variety of exotic animals captured and transported throughout the empire.

This is not to say that the Romans never made use of local animals; since cattle, for example, were presumably raised throughout virtually the entire empire, it would of course make sense for those staging *spectacula* involving bulls to procure them from local herds as need dictated. Representatives of the games' *editores* (the individuals financing and organizing such events) likely inspected local herds to find the largest and fiercest possible bulls.<sup>1</sup> To illustrate, although ancient sources cite Spain for its numerous herds of cattle, none of them mentions export of bulls for the games. According to Claudian, in the later empire at least, Spain (and Dalmatia) exported bears, rather than bulls, while Italy furnished its own cattle for the *venationes*.<sup>2</sup>

The distinguishing feature of most Roman *spectacula*, however, was the importation of a wide variety of animals, as we can deduce from the archaeological and literary evidence. The same show could theoretically include bears from Scotland, tigers from Armenia, and elephants from North Africa. Perhaps more than any other region, the east, in particular India, was an important source of exotic animals for the Romans. Asia Minor was evidently a notable supplier in the

Republican period, although many of the animals previously captured in this region began instead to be provided by Africa around the beginning of the imperial period.<sup>3</sup> Many animals were undoubtedly also captured in Syria, although direct evidence for wildlife obtained from this region is not abundant.

The territory controlled by Rome was, of course, much less urbanized than it is today. As a result, populations of wild animals in antiquity were found in places not normally associated with them in the present day. Artistic and literary evidence suggests that lions, for example, survived in Macedon and Thrace up until Aristotle's lifetime, and could even be found in Thessaly as late as the fourth century AD.<sup>4</sup> The now-extinct European bison was found throughout Europe, in areas such as Germany, Yugoslavia, and Bulgaria.<sup>5</sup> Crocodiles, hippopotami, rhinoceroses, and ichneumons were shipped from Egypt to Rome.<sup>6</sup> The coastal strip of North Africa supplied the Romans with elephants and many other animals not found in the same regions today.<sup>7</sup>

Some animals were obtained from more than one region. Leopards for the games were captured in Mesopotamia, Asia Minor, and North Africa.<sup>8</sup> Tigers and numerous other animals were sent to Rome from India and central Asia.<sup>9</sup> India, like Africa, was also a major source of elephants, particularly in the later empire. Such elephants likely passed through the Red Sea ports, as did their counterparts from Trogodytica (upper Egypt).<sup>10</sup> Indian elephants are depicted more frequently in Roman art (such as the Barberini diptych) than African (see page 241), perhaps reflecting their relatively frequent appearances in the elephant spectacles of the western empire.<sup>11</sup>

#### *Animal Extinction:*

Just as in the present day, animal populations and ranges did not remain constant in antiquity. There is, however, little direct information concerning this

wildlife fluctuation during the Roman period, and what exists can sometimes appear contradictory. Some authorities suggest a serious decline in wild animal populations, while others indicate that some species at least continued to flourish in the later empire. Much conjecture exists concerning the possible effects of Roman *spectacula* upon wild animal populations, but this, as we shall see, is based upon relatively little hard evidence.

Apart from elephants, exotic animals were apparently harder to come by in the later empire, which may have been the major factor leading to the end of animal *spectacula*. In the case of the hippopotamus, Ammianus Marcellinus, writing in the late fourth century, specifically states that in the past many such animals were exported from Egypt to Rome, presumably for the spectacles. In the same passage, he mentions that hippos were no longer to be found in the region, but had instead migrated further up the Nile to avoid hunters: *...nunc inveniri nusquam possunt....insectantis multitudinis taedio ad Blemmyas migrasse compulsi*.<sup>12</sup> Like hippos, the population of crocodiles also appears to have retreated to Upper Nubia at this time, presumably for the same reason.<sup>13</sup>

Two of Libanius' letters, written in the second half of the fourth century, also suggest a general decline in the number of animals available for *spectacula* at this time. In both 363 and 365, as recorded in the letters, imperial officials attempted to veto upcoming spectacles at Antioch: the second letter indicates that the rationale for this action was to preserve the more fearsome of the collected animals for the emperor's own *venationes*.<sup>14</sup> Further evidence of declining animal populations comes from a passage of Cassiodorus' *Chronica*, describing the games given in Rome by Theodoric's son-in-law in 519. Cassiodorus mentions "...beasts which the present age would admire as a novelty...", suggesting that the variety of animals did not live up to the standards of *venationes* staged in the early empire. In addition, he states that "...even Africa as a sign of devotion sent choice entertainments for the show...". This passage indicates that Africa was no longer a regular supplier of animals to

Rome and elsewhere. Such a situation was undoubtedly brought about, or at least exacerbated, by the Vandal conquests in North Africa, but Cassiodorus' statement may also suggest that the supply of exotic animals in the rest of North Africa was reduced even prior to the Vandal conquest of Carthage.<sup>15</sup> A poem likely written no later than the reign of Nero, from the *Anthologia Graeca*, supports this conclusion: it boasts of the eradication of wild animals, and particularly lions, from Libya.<sup>16</sup> Although this poem likely is an exaggeration, Strabo states that Roman and native hunters were active in Libya at least as early as the reign of Augustus, suggesting that local wildlife could have been under duress some fifty years before Nero.<sup>17</sup>

Some evidence exists that the supply of animals adjacent to and within Rome's eastern frontier during the later empire was also imperilled by animal *spectacula*. The *Hou-han-shu*, a fifth century Chinese document largely based on the records of a Chinese mission to the west in the late first century AD, appears to confirm Strabo's picture of a Mesopotamia rich in wildlife during the early empire. The text states that a journey through the eastern Roman empire (*Ta-Tsin*), possibly from Ctesiphon to Zeugma, could be quite hazardous because of the local fauna:

Although one is not alarmed by robbers, the road becomes unsafe by reason of fierce tigers and lions, who will attack passengers, and unless travelling be done in caravans of a hundred men or more, or under the protection of military equipment, one is liable to be devoured by those beasts.<sup>18</sup>

This text is consistent with other evidence from the early imperial period; Strabo, writing in the late first century BC, referred to Mesopotamia as λεοντοβότος ('fed on by lions'), a condition which appears to have remained for some time.<sup>19</sup> By the fifth century, however, judging by an imperial edict (see page 15), there were evidently enough lions left in the eastern empire to harass some rural provincials, but not enough routinely to threaten travellers or to allow indiscriminate capturing and selling of these animals.<sup>20</sup> The populations of other animals used in *spectacula* were in all likelihood similarly affected.

An interesting passage from the fourth-century orator Themistius suggests that the Romans recognized a shortage of various animals in the late empire, and may even have taken steps to protect them:

...And yet in hunting we leave behind their [the animals'] seed, and the one completely removing it is considered to be sinning against the hunt. And so we spare for ourselves the fiercest animals...so that by procreation they might be preserved and remain, and we are angry at the elephants removed from Libya, the lions from Thessaly, the hippopotami from the marshes around the Nile..<sup>21</sup>

Themistius does not specify what measures the Romans may have taken to protect endangered animals, but it is possible that provincials in the affected areas were officially banned from hunting or capturing them. In the fifth century, farmers in the east actually wrote to the emperor for permission before killing lions endangering both their lives and livelihood (see page 15).

It is important, however, not to assume on the basis of the preceeding authorities that widespread reductions in animal populations occurred throughout the empire. Other evidence suggests that wildlife on the eastern fringes of the empire, if depleted, was not critically affected by Roman trade. Ammianus notes in particular the large population of lions to be found in northern Mesopotamia even in the late fourth century. In order to help thwart the Sassanid invasion of the region in 359, a large plain was set alight by the Romans, as a result of which many wild animals were destroyed (*...exustae sunt ferae complures, maximeque leones...*).<sup>22</sup> According to Joshua Stylites, the region around Edessa was still full of wild animals at the beginning of the sixth century, some going so far as to scavenge upon men slain in the ongoing conflict between the Sassanids and Byzantines. Numerous animals, including as many as forty wild boars a day, were captured alive and sent to Edessa, most likely to appear in an upcoming *venatio*.<sup>23</sup>

To judge from the letters of Libanius, animals were still numerous enough in Asia Minor to supply *venationes* in late fourth century Antioch. In several letters concerning the procurement of animals, Libanius mentions the numerous bears of



Asia Minor, in particular Bithynia and the Troad.<sup>24</sup> In the first letter Libanius even implies that the bear population of Bithynia was large enough to constitute a threat to farmers. Another species frequently mentioned by Libanius is the leopard: evidently the area around Antioch itself had its own leopard population, from which it could send specimens to places such as Bithynia, or even the emperor himself.<sup>25</sup> Nowhere in the letters of Libanius does one gain the impression of a serious wildlife shortage in contemporary Asia Minor: at least the bear and leopard populations appear to have been comparatively unaffected by the need to supply the *venationes*. One of Symmachus' *Relationes*, written in 384, also indicates that Indian wild animals and *elefantos regios* were still to be found in Rome at that time.<sup>26</sup>

Despite the Roman animal *spectacula*, large numbers of lions are known to have survived in Algeria and Morocco until at least the nineteenth century, while leopards also survived as long in the former country. Large numbers of ostriches also survived in these countries at the beginning of the twentieth century.<sup>27</sup> Gazelle populations were large enough to pose a threat to crops as late as the fourth century in Egypt.<sup>28</sup> In the sixth century the Vandals in North Africa continued to stage a number of *venationes* involving such animals as bears and leopards.<sup>29</sup> While Roman actions appear to have caused the extinction of the hippopotamus, elephant, and rhinoceros in northwest Africa, the populations of these animals in the region were already quite small and therefore vulnerable to extinction even before the Romans became active there.<sup>30</sup>

Although the procurement of animals damaged many populations, it is nevertheless important to note that animal *spectacula* were not solely responsible for a decline in wildlife numbers. The trade in exotic animal products, such as ivory, may well have led to the death of more or at least as many animals as the Roman spectacles.<sup>31</sup> Contrary to the opinion of a number of scholars, there is no firm evidence that the *venationes* alone caused the widespread extinction of species.<sup>32</sup> For

example, Brice, in his discussion of animal extinctions in ancient Anatolia, suggests that deforestation was the primary reason for the disappearance of various species from the region, and does not even mention animal *spectacula* as a possible cause.<sup>33</sup>

Although the *venationes* have been blamed for the reduced number of wild animals in present-day, as compared to ancient, North Africa, it is debatable how devastating an effect they alone had upon the ecology of Roman-held territory. In North Africa, Roman animal-export alone does not appear to have resulted in drastically decreased populations, contrary to Auguet's assertion that "...by staging...entertainments, Rome modified the fauna of a continent".<sup>34</sup> Since North Africa was one of the principal suppliers of animals, one would indeed expect that it would be the region most 'zoologically' damaged in the empire. The limited evidence, however, suggests that this was not the case.

One of the chief causes of decline in animal populations, at least in North Africa, may have been the agricultural exploitation of the region under Roman rule. Bomgardner has in fact gone so far as to claim that widespread *venationes* in North Africa were merely a by-product of the intensive cultivation of the region by the Romans. The need to clear large tracts of land for agriculture led to the capture of indigenous wild animals, most of which were dispatched in the amphitheatre. It is perhaps no accident that cities such as El Djem, which were centres of African grain and olive production from the second century onwards, are known to have staged numerous large-scale beast-hunts.<sup>35</sup> A poem of Luxorius succinctly describes this Roman agricultural policy in North Africa: *Fecundus nil perdit ager, plus germina crescunt. Dum metuunt omnes hic* [in the amphitheatre] *sua fata ferae*.<sup>36</sup> As Shaw sums up:

...the tens of thousands of...animals purposefully hunted down for the arena were...a small proportion of the total that must have yielded to more mundane processes such as the systematic destruction of their habitats by the expansion of agricultural settlements.<sup>37</sup>

Another cause of reduced animal populations in certain regions may have been changes in climate that occurred during the Roman period. Gowers, in his discussion of the rhinoceros in antiquity, suggests that the Romans were not solely responsible for the disappearance of these animals from the lower Nile. The range of rhinoceroses along the Nile had already shrunk considerably, due to increasing aridity in the region, by the beginning of the common era, precisely when they first appeared in Roman spectacles.<sup>38</sup> In addition, the apparent disappearance of African rhinoceroses from Roman spectacles after 248 should not be attributed to their extinction in Ethiopia, their primary source of such animals: the military unrest which began in the mid-third century, and which seriously undermined Roman influence and trade in the region, should be viewed as a more likely culprit.<sup>39</sup>

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Notes:

<sup>1</sup> Specialized herds of bulls may have even been set aside for the games: see Ville (1981) 349.

<sup>2</sup> Claudian, *Consul. Stilich.*, 3, 302ss; Blázquez (1962) 63, 65: two letters of Symmachus (7, 121; 9, 142) also confirm that bears were being shipped from Dalmatia to Rome in the later empire.

<sup>3</sup> Plutarch, *Cicero*, 36, 6; Bertrand (1987) 212, n. 10.

<sup>4</sup> Aristotle, *Historia Animalium*, 6, 579b; 8, 606b; Themistius, *Orationes*, 10, 140; Orth (1914) 595-96; Anderson (1985) 4.

<sup>5</sup> Aristotle, *Historia Animalium*, 2, 500a; 9, 630a; Orth (1914) 593-94; Velkov and Alexandrov (1988) 275.

<sup>6</sup> Frank (1959) Vol. 2; 348: For the hunting of ichneumons see Nemesianus, *Cynegetica*, 54-55.

<sup>7</sup> Rostovtzeff (1963) 335-38; Bertrand (1987) 227-28; Toynbee (1996) 53.

<sup>8</sup> Orth (1914) 601-02; Bertrand (1987) 211.

<sup>9</sup> Pliny, *NH*, 8, 25; *Dig.* 39, 4, 16(7); *SHA*, *Aurelian*, 5; Frank (1959) Vol. 4, 201.

<sup>10</sup> Strabo, 17, 815; Pliny, *NH*, 8, 96; Dio, 51, 22; *SHA*, *Antoninus*, 10; *Gordiani Tres*, 33; Frank (1959) Vol. 2, 348, n. 570.

<sup>11</sup> Whitehouse (1991) 277-78: Since Indian elephants are generally more docile and easier to train than African elephants, the Romans would in all likelihood have preferred to employ them in animal-spectacles: private communication, Megan Komph, elephant-handler at Edmonton Valley Zoo. For similar reasons, the majority of elephants bred by the Romans themselves may also have been of the Indian variety.

<sup>12</sup> Ammianus Marcellinus 22, 15, 24.

<sup>13</sup> Hughes (1996) 106.

<sup>14</sup> Libanius, *Epistulae*, 218, 1520; Liebeschuetz (1959) 118.

<sup>15</sup> Cassiodorus, *Chronica*, a. 519; Ward-Perkins (1984) 116.

<sup>16</sup> *Anthologia Graeca*, 7, 626; Paton, in his Loeb edition of the anthology, (Vol. 2, p. 1) attributes this particular poem to the collection made by Phillipus, which the *OD* states was likely published under Nero ("Phillipus", p. 1163); also see Gow (1958) 15,

28.

<sup>17</sup> Strabo 2, 5, 33.

<sup>18</sup> Firth (1885): 3-5, 12-13, 219. Two other Chinese sources record that black bears, as well as jackals or hyenas, were also native to Ta-Ts'in. The latter animal, called Ts'ung by the Chinese, is described as a fierce dog-sized creature able to be domesticated, which suggests either of the two alternatives listed above for its identification: see Firth (1885) 220.

<sup>19</sup> Strabo 16, 1, 24.

<sup>20</sup> *CT* 15, 11, 1.

<sup>21</sup> Themistius, *Orationes*, 10, 140: since Themistius does not use the adverb παντελῶς ('completely') when describing the removal of animals, as he does later in the same passage when mentioning to the eradication of a barbarian tribe, one can perhaps infer that he is not referring to extinction.

<sup>22</sup> Ammianus Marcellinus 18, 7, 4-5.

<sup>23</sup> Joshua Stylites 85, 90: Wright (1968) 67, 70.

<sup>24</sup> Libanius, *Epistulae*, 219, 544, 586, 588, 598-99, (W1120), 1399-1400.

<sup>25</sup> Libanius, *Epistulae*, 219, 588, 598, (W604).

<sup>26</sup> Barrow (1973) 65-71.

<sup>27</sup> Shaw (1981) 386.

<sup>28</sup> Bomgardner (1992) 163.

<sup>29</sup> Bomgardner (1989) 91-92.

<sup>30</sup> Shaw (1981) 386-87. Bomgardner [(1992) 164] has a much more negative view of the effect of the Roman *venationes* upon African wildlife, but his argument appears flawed in several respects: for instance, he argues that the decreased supply of African felines, beginning in the late second century, led to the increasing use of local animals and bears in subsequent spectacles throughout the empire. However, as will be argued below, outside of major centres like Rome, local animals appear to have been used in a majority of arena spectacles, even in the early empire.

<sup>31</sup> Hughes (1996) 106.

<sup>32</sup> Hughes [(1996) 106], for example, states that, "Distant areas felt the Roman demands [for animals]; tigers disappeared from Armenia, and from Hyrcania in northern Iran, the closest sources to Rome." However, the only evidence Hughes adduces for this statement is a passage from Virgil [*Eclogues*, V, 29-30], which in reality appears to have nothing to do with eastern tiger populations: ...*Daphnis et Armenias curru subiungere tigris instituit*...

<sup>33</sup> Brice (1978) 141-43.

<sup>34</sup> Auguet (1972) 107.

<sup>35</sup> Bomgardner (1992) 162-63.

<sup>36</sup> *Anthologia Palatina*, 7, 626: Bomgardner (1992) 164.

<sup>37</sup> Shaw (1981) 387.

<sup>38</sup> Gowers (1950) 63.

<sup>39</sup> Gowers (1950) 69.

Appendix C:

The Animals of the *Spectacula*

*Elephants:*

Although elephants, both African and Indian, had been a part of Hellenistic warfare since the campaigns of Alexander, the Romans' first experience with these animals took place in 280 BC, when Pyrrhus arrived in Italy with an army which included twenty Indian elephants. After the final defeat of Pyrrhus in 275 BC, the consul Dentatus included four captured elephants in his triumphal procession in Rome, the first time the city's inhabitants had seen these so-called 'Lucanian cows'.<sup>1</sup> This may well have been one of the few times this variety of elephants was exhibited in Rome: the Indian elephants the Romans captured after the battle of Magnesia (190 BC) were given to their ally, Eumenes of Pergamon.<sup>2</sup>

Rome had further experience with war-elephants, this time of the African variety, in its wars with Carthage later in the third century BC. Several of the animals used by the Carthaginians in various engagements, such as the battle of Agrigentum in 262 BC, were captured by the Romans. The Romans themselves made limited use of war-elephants during the late Republican period, such as those used by the Pompeian forces against Caesar at the battle of Thapsus in 46 BC.<sup>3</sup>

Pliny records that the first two displays of elephants in Rome were at the triumph of Dentatus and the display of 140 or 142 captured Carthaginian elephants by Lucius Caecilius Metellus after the battle of Panormus in 250 BC.<sup>4</sup> It was unclear to Pliny whether or not Metellus' elephants were killed in the Circus Maximus or merely paraded around it: if the elephants were not killed, they may have been subsequently kept in state enclosures like those attested for the later Republican and imperial periods. Caesar is reported to have sent for elephants from such a facility in Italy just prior to the battle of Thapsus. This enclosure may or may not have been the

same one attested for the early imperial period in Laurentum.<sup>5</sup> Further captured Carthaginian elephants were exhibited by Scipio Africanus in Rome after his victory at Zama in 202 BC.<sup>6</sup>

The Romans may have originally been forced to set up enclosures in the third century BC to house the large number of elephants captured in the wars with Pyrrhus and the Carthaginians. If they indeed began to breed their own elephants at this time, it would at least partially account for the use of elephants by Republican generals, something Livy implies was not uncommon. Aelian confirms that by Germanicus' day at the latest such animals were indeed bred in Italy.<sup>7</sup>

The Romans likely attempted to procure experienced elephant-handlers for their own enclosures from the third century BC onwards. Since the Egyptians, however, no longer seem to have regularly imported Ethiopian elephants after the battle of Raphia in 217 BC, it is unlikely that the Romans would have obtained such individuals from this source after this date.<sup>8</sup> Many trainers may have originally come from Carthage: along with elephants captured during the Punic Wars, the Romans were also able to make use of the Carthaginian's own Indian mahouts which the latter employed to look after these animals. After his victory at Panormus in 251 BC, Metellus took several of the captured elephants' trainers with him on his way to Rome, where they no doubt ensured that his procession in the Circus Maximus went smoothly, with no embarrassing fatalities amongst the crowd of onlookers. Such trainers would also have been necessary for the crossing of the animals from Sicily to Rhegium on an improvised pontoon bridge.<sup>9</sup>

The only known *spectaculum* in Rome involving elephants in the second century BC was the one staged by the aediles of 169 BC, which also included 40 bears and 63 *Africanæ bestiae*.<sup>10</sup> The next recorded appearance of elephants in Rome's Circus Maximus was that staged by the aedile Gaius Claudius Pulcher in 99 BC, possibly the first time that they fought as part of the spectacle. In 79 BC the aediles Marcus and Lucius Lucullus staged the first combat between elephants and bulls for the

Roman populace. The fact that Pliny specifically mentions the first instance of this combat suggests that such encounters were relatively common in *venationes* involving elephants. Two such encounters in the Colosseum well over a hundred years later are described by Martial.<sup>11</sup> In addition, a mosaic found on the Aventine in Rome depicts just such a pairing, as does a medallion showing the Colosseum minted by Gordian III.<sup>12</sup>

The most famous *spectaculum* involving elephants was undoubtedly that put on in the Circus Maximus by Pompey in 55 BC, following his unsuccessful attempt to enter Rome on an elephant-drawn chariot at his African triumph 25 years earlier.<sup>13</sup> On this occasion approximately twenty African elephants were killed in combat with javelin-wielding Gaetulians, much to the grief of the spectators.<sup>14</sup> Pompey's elephant spectacle, without the unfavourable public reaction, was imitated by Caesar at his quadruple triumph only nine years later. A procession up to the Capitol with forty torch-bearing elephants was followed by elaborate elephant combats. Teams of twenty elephants first fought against each other, followed by twenty elephants fighting 500 infantry. According to Pliny, the same number of elephants, carrying infantry in turrets on their backs, subsequently fought a force comprised of 500 infantry and 500 cavalry. A combat between forces numbering, in total, twenty elephants, 500 infantry, and 300 cavalry is also recorded by Suetonius as having occurred on this occasion.<sup>15</sup> The fate of these elephants is not known for certain, but the majority may well have survived this spectacle: the elephants that Octavian captured from Antony's forces near Brundisium shortly after Caesar's death may have belonged to this group, sent from Rome to Brundisium for the latter's projected Parthian campaign.<sup>16</sup>

According to Jennison, Augustus may have displayed elephants from as far away as southeast Asia during his reign. Amongst the numerous embassies that reached the empire during Augustus' reign, Florus records a group of *Seres...habitanesque sub ipso sole Indi* who had journeyed four years to reach Rome,

bringing various precious gifts, including elephants, to Augustus.<sup>17</sup> Horace also mentions a white elephant, which may have been one of those brought by these ambassadors, being displayed in Rome.<sup>18</sup> Although Jennison's theory might be correct, it is also possible that the elephants brought to Rome by the eastern ambassadors may have been procured by them along their route, rather than being indigenous to Indochina. Keeping even a single elephant fed over a four-year march would require an enormous amount of fodder.

Although elephants possibly did not feature in the various *spectacula* given under Augustus and Tiberius, at least some subsequently reappeared in the events of Claudius and Nero. Pliny records that successful single combat against an elephant was the high-point of a gladiator's career (*consummatio gladiatorum*) under these emperors.<sup>19</sup> Elephants next appeared in the shows given by Titus to celebrate the dedication of the Colosseum in 80, as well as at the end of the first century.<sup>20</sup>

Subsequent imperial *spectacula* involving elephants were evidently somewhat rare. The *Historia Augusta* credits Antoninus Pius (138-61) with including elephants in one of his *munera*, an assertion which a series of Antoninus' MUNIFICENTIA coins bearing an image of an elephant on the reverse appears to confirm.<sup>21</sup> Commodus (180-93) is said to have personally slain three elephants, amongst many other creatures, as part of the numerous *venationes* he put on during his reign, a statement seemingly borne out by samples of his MUNIFICENTIA coinage depicting an African elephant.<sup>22</sup> Such coinage also suggests that elephants were featured in *munera* given by Septimius Severus in 196-97, Geta in 212, and Caracalla in 212-13.<sup>23</sup> The *venatio* staged by Elagabalus (218-22) to celebrate his marriage included an elephant, while Philip the Arab's (244-49) far more lavish *venatio* as part of the Secular Games of 248 included 32 elephants. In the next recorded exhibition of these animals, 20 elephants, whose ultimate fate is uncertain, were apparently included in Aurelian's (270-75) triumph celebrated in 274.<sup>24</sup> Anastasius (491-518) received an elephant as a gift from the king of 'India' (Aksum in Ethiopia) in 496, which he



appears to have displayed to the populace of Constantinople.<sup>25</sup> John of Ephesus records elephants paying homage to the emperor as part of sixth century games in the Circus of Constantinople.<sup>26</sup> Finally, Heraclius, amidst popular acclaim, is said to have displayed four elephants in Constantinople's hippodrome in 629.<sup>27</sup>

Elephants, perhaps more than any other animals used in *spectacula*, participated in non-violent displays of what we would call circus tricks in the arena, because of the regard Romans like Cicero and Pliny the Elder felt for their intelligence. Cicero records that many Romans at Pompey's show in 55 BC felt that humans and elephants had something in common (*quaedam societas*) because of their superior intelligence, while Pliny praises the elephant for virtues rarely possessed by mankind.<sup>28</sup> Various emperors from Augustus (27 BC-AD 14) to Constantius II (337-61) also had themselves depicted behind elephant-drawn chariots, in such media as coinage, as a mark of their divine or 'superhuman' status, in imitation of the Hellenistic practice of associating Alexander the Great and Dionysus with such animals.<sup>29</sup> Caracalla is even said to have travelled around with a group of such animals in order to associate himself with these famous figures.<sup>30</sup> By the late third century elephant ownership was evidently restricted to the emperor: this regulation which may have been influenced by a similar statute pertaining to royal ownership of elephants in India, which existed at least as early as Strabo's lifetime.<sup>31</sup> According to Galen, elephant hearts were a delicacy enjoyed by the imperial court in Rome.<sup>32</sup>

The forty elephants which escorted Caesar to the Capitol in 46 BC were trained to carry lighted torches, evidently in imitation of elephants owned by such Hellenistic monarchs as Antiochus VI (145-142 BC).<sup>33</sup> Tightrope-walking by elephants in the arena is recorded on more than one occasion from the praetorship of Galba (c. 33) onwards: Suetonius adds in his account that the tight-rope walking elephants of Galba were a *novum spectaculi genus* in Rome. Exhibitions of dancing

elephants are known to have occurred prior to Germanicus' death in AD 19, and Pliny also records elephants throwing various weapons with their trunks in the arena.<sup>34</sup>

On at least two occasions elaborate banquets, with trained elephants acting as dinner guests, were also staged in the arena, much to the audience's delight.<sup>35</sup> Aelian gives a detailed description of the twelve elephants at Germanicus' spectacle of 12 AD(?), who were trained by an ὀρχηστροδιδάσκαλος to perform an elaborate tragic dance, sprinkling flowers on the floor of the arena as they went. After this dance, the elephants won even greater acclaim by participating in a mock banquet for the audience, with six dressed as males and the rest as females.<sup>36</sup> Horace and Plutarch report that elephants on occasion even appeared on the Roman stage, performing elaborate pantomimes such as mock combat with swords.<sup>37</sup> Pliny records the amusing anecdote of an elephant found practicing a trick at night which it had been punished for failing to perform during the day.<sup>38</sup>

Finally, the second century author Arrian records having himself seen elephants, presumably in the arena, dancing and playing cymbals with their trunks and front legs.<sup>39</sup> The employment of elephants in such non-violent entertainment in the imperial period may have something to do with the previously-mentioned practice of associating elephants with the emperor's divinity: some may have felt that continuing to slaughter elephants in the arena like other 'run of the mill' animals would reflect poorly upon the emperors of whom they were symbolic.

The different techniques of capturing Indian and African elephants are described in some detail by Pliny, who also adds that captured elephants could be quickly mollified by barley sap (*hordei sucus*).<sup>40</sup> Unfortunately Pliny does not state whether this drink was fermented or not! Jennison indeed suggests that Pliny's phrase refers to beer, noting that modern-day elephants enjoy drinking this beverage.<sup>41</sup> Pliny seems to imply that the barley juice was used as a 'training aid' for captured elephants, rather than as a means of drugging the animals so that they could be safely removed from the pits they had been trapped in.<sup>42</sup>

Ptolemy Philopater (221-204 BC), in an abortive attempt to destroy the Jews in Alexandria, is said to have employed frankincense and unmixed wine in order to drug his elephants enough so that they could be safely led into the city's hippodrome. Curiously enough, however, this wine was also intended to have the opposite effect of enraging the elephants enough so that they would trample the Jews collected in the hippodrome.<sup>43</sup> Although this account as a whole is apocryphal, along with the evidence just cited from Pliny, it suggests that unmixed wine and beer may have in fact been a standard means to mollify elephants in antiquity.

Further evidence of the use of alcohol with elephants comes from *I Maccabees*. According to this source, the Seleucid elephants, prior to the battle with the Maccabees in 162 BC, were given grape and mulberry juice, presumably fermented, to prepare them for battle.<sup>44</sup> Although some scholars have assumed that this beverage was given to rouse the elephants into a fighting rage, the Greek of the passage is not so specific: it merely states that it was given ...τοῦ παραστήσαι αὐτοὺς εἰς τὸν πόλεμον.<sup>45</sup> The wine may have been used to calm the elephants' nerves somewhat before they entered the chaos of battle. Aelian confirms that rice or cane wine was used for war-elephants, but unfortunately does not specify what exact effect this alcohol was meant to have upon the animals.<sup>46</sup>

As with humans, the effect of alcohol upon individual elephants may well have varied. Although elephants, like men, were given wine to calm their nerves before battle, this same beverage, in certain cases, had the opposite effect of driving some combatants into a fighting rage. Hanson, in his discussion of hoplites and wine, effectively sums up the differing effects alcohol could have: "Instead of steeling their [the hoplites'] nerves for the upcoming encounter, drink could just as well endanger their chances of success due to alcohol-induced recklessness."<sup>47</sup>

According to Pliny, in an account similar to that given by Aristotle centuries earlier, elephants in India were captured by mahouts on their own mounts isolating another elephant and then flogging it into exhaustion, after which it could be safely

mounted by its attacker.<sup>48</sup> Aelian records that the Indians captured young elephants in the swamps they frequented, since hunters had trouble capturing adult specimens, a supposition shared by no other extant author.<sup>49</sup> Both Strabo and Arrian, drawing upon the account of the fourth century geographer Megasthenes, give a much fuller description of the elephant-capturing technique used in India. Indian hunters would first of all dig a deep trench approximately nine metres wide and seven metres deep around a circle of land four or five stades in circumference, and then place a narrow bridge, camouflaged with earth and grass, across the chasm. The hunters would then build a thick wall surrounding the trench out of dirt excavated in the latter's construction. Chambers dug into this wall would allow the hunters to see the approaching wild elephants without being observed themselves. A few tame female elephants would then be led onto this artificial island to act as bait for the amorous wild male elephants. After some of the latter elephants had crossed the bridge, the hunters would lead some of their tame elephants across it and then close the entrance. Over a period of time the wild elephants would be weakened by the attacks of these tame elephants, as well as by starvation, until the hunters could bind the feet of the former animals together and have them knocked over, thereby rendering them helpless. At this point the hunters would bind the wild elephants to the tame elephants by ox-hide straps passed through slits cut into their necks, and then lead them off to be trained. According to Strabo the captured elephants, after being tied to pillars, would be pacified through hunger, while Arrian records that the Indians calmed these animals with soothing music.<sup>50</sup>

The technique used to capture elephants in Africa was quite different: hunters would merely wait for an elephant to fall into a previously-dug pit-fall, or they could actually chase one into a ready made trench and starve it into submission.<sup>51</sup> A similar technique is described by Timothy of Gaza, who in his brief description of elephants states that such animals...παρὰ τοῖς Μαύροις δόλω καὶ τάφροις ἀγρεύονται, making no reference to their capture in India.<sup>52</sup> According to king Juba of Mauretania (25 BC-

AD 23), other elephants would attempt to assist elephants captured in this manner by piling brushwood in the pits to build a ramp, a suggestion strongly refuted by Plutarch.<sup>53</sup> Aelian records that the elephants captured in a trench would each be tied to a tree and starved until they would accept food from their keepers and thereby become pacified.<sup>54</sup>

Although Pliny and other authors mention the capture of Indian elephants, this in itself does not necessarily indicate that the Romans were importing large numbers of them from far-away India for their imperial *spectacula*: such authors, for interest's sake, may merely have been drawing on earlier Hellenistic writers, such as Megasthenes, acquainted with the elephants imported from the east for the Seleucid army. Some of these elephants, however, did in fact exist even in Republican Rome, whether through trade or through the breeding of previously-captured stock: Lucretius' statement that Rome saw very few Indian elephants of course implies that a small number did make their way to the city.<sup>55</sup> Tooth and bone fragments from an Indian elephant discovered in Ostia presumably come from an animal brought to Italy for the games.<sup>56</sup> The majority of elephants depicted in the wall-paintings associated with Rome's animal-enclosure are also of the Indian variety (see page 70). The elephants that a Persian embassy brought to Theodosius in 389 were presumably also of this type.<sup>57</sup> Since the Indian elephant is evidently easier to train than its African counterpart, the Romans may well have attempted to breed the former type of elephant in captivity even more so than the latter.<sup>58</sup>

An indication, however, that the Romans obtained the majority of their elephants from Africa rather than India is the curious statement made by both Pliny and Polybius that elephants from the former region were smaller than those from the latter.<sup>59</sup> Modern African elephants, in fact, are larger on average than their Indian counterparts. The easiest way to explain this anomaly, short of simply assuming an error on the part of Polybius and Pliny, is to assume that the African elephants described by both authors are a species of so-called 'Forest' elephant native

to the northwest corner of Africa, smaller even than their Indian counterparts. Such elephants from the Atlas Mountain region were used by Hannibal's army in the Second Punic War, and due to their relative proximity to Rome, may well have formed the primary population of elephants exported for Roman *spectacula*. Writing in 1974, Scullard noted that approximately 100 of these elephants survived to that date in Mauretania, but had long since died out further north.<sup>60</sup> Any elephants which the Romans obtained from the region of modern-day Ethiopia also appear to have been relatively small forest elephants: the larger bush elephants, which are commonly thought of as the typical African elephant, were not discovered until explorers penetrated central Africa in the nineteenth century.<sup>61</sup>

Other evidence, both artistic and literary, also suggests that the Romans obtained the majority of their elephants from North Africa. Solinus, writing in the third century, states that elephants are plentiful in Mauretania, while approximately a century later, Themistius implies that the population of such animals in Libya is endangered, a sentiment echoed by Isidore of Seville in the seventh century. Such an apparent reduction of elephants in that area, while partially due to their relatively small population, may well have been exacerbated by the Roman ivory and animal trade.<sup>62</sup>

The main item of export from central Africa to Tripolitania was apparently elephants and their tusks, as suggested by the elephant coat-of-arms possessed by both Sabratha and Lepcis Magna, as well as the mosaic of Sabratha's *annona* office in Ostia dating to c. 200, which depicts an elephant (Fig. 51).<sup>63</sup> The latter piece of evidence suggests that caravans with these animals from eastern Numidia and as far away as Timbuctu travelled to Sabratha as well as Lepcis Magna.<sup>64</sup>

The importance of elephants to the economy of Lepcis Magna in particular is suggested by the large marble statue of an elephant situated beside one of the busiest streets in the city, between the produce and textile(?) markets adjacent to the arches of Tiberius and Trajan.<sup>65</sup> In addition, a small quadrifrons arch found in the forum of

Lepcis Magna evidently honours one of the city's entrepreneurs involved in obtaining elephants from central Africa. The inscription on the arch, dating to the fourth century AD, honours a certain Porfyrius, *amator patriae*, for giving four live elephants to the city: it also indicates that a *biga* originally stood on top of the structure. The two ships carved on one side of the arch would seem to confirm that Porfyrius was indeed employed in shipping elephants, and quite possibly other African wild animals, from Lepcis Magna to Rome and other centres.<sup>66</sup> The elephants donated by Porfyrius may have been given for an upcoming *spectaculum*: another possibility is that Lepcis Magna, like Rome, may have maintained its own enclosure of wild animals either for spectacles or for export, to which Porfyrius generously contributed his animals. As Aurigemma notes, this fourth-century arch is also significant because it may call into question Themistius' assertion that the elephant population of North Africa was seriously endangered in that century: enough still evidently existed for local entrepreneurs like Profyrius to make a living.<sup>67</sup>

One of the principal sources for the elephants brought to Lepcis Magna and the other cities of Roman North Africa appears to have been the Fezzan region, which in all likelihood also supplied the Carthaginians with many of their animals at an earlier date. This region was evidently rich in elephants long before the introduction of the camel into Africa and the extension of Roman power into the continent.<sup>68</sup> Pliny also appears to identify the Fezzan as a prime elephant-producing region for the Romans: *Elephantos fert Africa ultra Syrticas solitudines et in Mauretania...*<sup>69</sup>

A series of rock-cut reliefs found in the Fezzan, some of which have been dated to the period between 12,000 and 3,000 BC, also attest to the abundance of elephants and other animals in that area at an early date. A relief from Uadi Gleft depicts an elephant and what appears to be a two-horned rhinoceros, while another relief from Uadi in Habeter shows another elephant together with two giraffes. A third relief from Uadi Telissaghen depicts an elephant being followed by a ram. Elephants alone

are also depicted in a number of reliefs from the Fezzan.<sup>70</sup> At a much later date, the presence of elephants near the Mediterranean coast of North Africa is noted in the account of the Carthaginian Hanno's voyage through the Pillars of Hercules, which allegedly occurred sometime in the fifth century BC.<sup>71</sup>

From the Hellenistic period onwards, elephants such as these were a common emblem of Africa because of the rich ivory trade associated with the continent.<sup>72</sup> Elephant or elephant head-dress coin-types minted by various Numidian and Mauretanian kings suggest that these monarchs, like the Ptolemies in Egypt, were involved in hunting elephants for their ivory from areas like the Fezzan at least as early as the third century BC, although elephant-hunting in this region in all probability started at a much earlier date, given the abundance of these animals just mentioned. The earliest of these coins dates to the reign of the Numidian king Massinissa (202-148 BC), while the latest dates to the reign of the Mauretanian king Juba II (25 BC- AD 23). Similar coin-types were minted by the Republican magistrates Cestius and Norbanus (c. 44 BC), and continued to appear in imperial coinage up until at least the reign of Septimius Severus.<sup>73</sup> In the latter instances, however, such coins may have been as evocative of recent *spectacula* involving elephants as they were of the longstanding African ivory trade.

Literary evidence confirms that elephants were being hunted in areas of northern Africa like the Fezzan as early as the first century BC. Appian records that Hasdrubal, the son of Gisco, was sent to capture elephants in preparation for the arrival of Cato the Younger in Africa during the civil war between the forces of Pompey and Caesar.<sup>74</sup> The fact that Hasdrubal was evidently able to complete his task within a short period of time implies that he obtained his elephants from a region like the Fezzan which lay relatively close to Carthage.<sup>75</sup> Plutarch specifically records that elephant-hunting went on in Numidia during Pompey's lifetime.<sup>76</sup> The elephants deployed by Juba at the battle of Thapsus were evidently captured in



coastal North Africa: Florus records that they came from a forested region (*nuperi a silva*).<sup>77</sup>

Hunters bringing elephants and other animals out of the Fezzan to Lepcis Magna and other coastal cities likely followed age-old caravan routes which have continued in use almost to the present day. In the nineteenth century the area of North African coast where Lepcis Magna had stood in antiquity was both the terminus and starting-point for such routes leading into the heart of the continent. One route led south from the Mediterranean coast to the region around Lake Chad, while another branched off to the southwest and proceeded as far as modern-day Timbuctu, on the upper reaches of the Niger river. Goods could also evidently reach Lepcis Magna and other cities on the North African coast from as far away as Ethiopia.<sup>78</sup>

Although wild animals continued to be exported from Africa to Rome as late as the fourth century, elephants may have been at least partially extinct in North Africa by this date.<sup>79</sup> Elephants, judging by the epigraphic record, appear to have disappeared relatively quickly from the *spectacula* in Rome and elsewhere.<sup>80</sup> By the later third century ownership of elephants appears to have been an imperial privilege, perhaps reflecting the decreasing supply of such animals from Africa at that time.<sup>81</sup> At some time before Aelian's death in c. 230, likely for similar reasons, imperial permission evidently had to be obtained for the hunting of elephants. Aelian tells the tale of an individual specializing in the Mauretanian method of elephant-hunting who first had to obtain δύναμιν... βασιλέως τοῦ Ῥωμαίων before setting out into the wilderness.<sup>82</sup> Both of these measures were evidently designed to ensure that no elephants could be purchased by wealthy private citizens, thereby securing all available elephants for the imperial house.

A late second or early third century sarcophagus discussed by Mielsch may also support the idea that African elephants were in short supply at this time. The sarcophagus, possibly from a Roman workshop, depicts African elephants in combat

with other animals at either end (Fig. 52). Both elephants wear bells around their necks, which may indicate a setting in the arena. On the left side of the sarcophagus an elephant is depicted overcoming a leopard, while on the right another dispatches a bull. Mielsch has suggested that the owner of this sarcophagus may well have been involved in the *venationes* in some capacity, but this is questionable: one need only consider that the numerous individuals who commissioned lion sarcophagi were presumably not all involved in animal *spectacula*.<sup>83</sup>

Other later third century elephant sarcophagi similar to this example may have been inspired by the relatively large number of elephants (32) said to have been imported by Gordian III for the Secular Games of 248, which far outstripped the number of elephants involved in *spectacula* earlier in the century. This sudden 'influx' of elephants into Rome may well have inspired sarcophagus artisans and their patrons.<sup>84</sup> A medallion of Gordian III, depicting an elephant fighting a bull in the Colosseum, may also represent one of the animals imported by the emperor (Fig. 53).<sup>85</sup> This renewed importation of elephants may have continued for some time: a scene from the Piazza Armerina mosaic of an African elephant being loaded onto a ship indicates that in c. 300 at least a few such animals continued to be imported from Africa.

Other literary evidence, however, suggests a subsequent scarcity of elephants in Rome, an indication that the trade in such animals was not nearly so extensive as it had once been. St. Ambrose, writing in the late fourth century, evidently never saw such a creature: in one of his writings he made the erroneous assertion that elephants are taller than all other creatures and are unable to bend their legs. The contemporary letters and poems of Symmachus and Claudian concerned with the gathering of animals for various *spectacula* hardly mention elephants. Finally, in a letter written to the city prefect of Rome on behalf of the Gothic king Theodahad in 535/36, Cassiodorus repeats St. Ambrose's error concerning the flexibility of elephant legs, and in addition states that some bronze statues of elephants which had fallen

into disrepair should be restored so that Romans who had never seen such animals could obtain some idea of what they looked like (*...ut qui vivam substantiam non viderent, opinatum animal tali imaginatione cognoscant...*).<sup>86</sup>

A late fifth or early-sixth century papyrus, containing a letter between Roman officials, has a depiction of an elephant and its keeper on its back, the oldest known drawing of an African elephant from classical times (Fig. 54). The elaborate headgear on the elephant-keeper suggests a setting in the circus or amphitheatre, rather than a magical or religious context. The sketch may be related to the elephant and two giraffes sent from the 'kingdom of India' (Aksum in Ethiopia) to Anastasius in 496 (see page 131). At this time the kings of Aksum apparently had a monopoly on such trained elephants.<sup>87</sup> Isidore of Seville, writing in the early seventh century, comments that India, and no longer Africa, produces elephants, but it is possible that by India in this passage he means Aksum.<sup>88</sup>

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Notes:

<sup>1</sup> Seneca, *De Brevitate Vitae*, 13, 3; Eutropius 2, 14; Toynbee (1996) 32-34: For the use of the nickname 'Lucanian cow' see Lucretius 5, 1302-04; Varro, *De Lingua Latinae*, 7, 39-40; Pliny, *NH*, 8, 6.

<sup>2</sup> Keller (1913) Vol. 1; 375-76.

<sup>3</sup> Toynbee (1996) 34-38: For a more detailed account of the Roman use of war-elephants in the Republican period, see Scullard (1974) 178-85, 190-98.

<sup>4</sup> Pliny, *NH*, 8, 6; Toynbee (1996) 35.

<sup>5</sup> Dio 43, 4, 1: ILS 1578; Toynbee (1996) 37, 47.

<sup>6</sup> Appian, *Punic Wars*, 66; Scullard (1974) 170.

<sup>7</sup> Livy 12, 107-10; Aelian, *De Natura Animalium*, 2, 11.

<sup>8</sup> Jennison (1937) 29.

<sup>9</sup> Jennison (1937) 38, n. 2; 44: For the use of Indian mahouts by the Carthaginian army, see Polybius 1, 40, 15; 3, 46, 7-8; 11, 1, 12: For Metellus' capture and transport of the animals, see Zonaras 8, 14; Frontinus 1, 7, 1.

<sup>10</sup> Livy 44, 18, 8; Toynbee (1996) 17.

<sup>11</sup> Pliny, *NH*, 8, 7; Martial, *De Spectaculis*, 17, 19; Toynbee (1996) 48; Hughes (1996) 101.

<sup>12</sup> Scullard (1974) Pl. 17b, 24e.

<sup>13</sup> Pliny, *NH*, 8, 2; Plutarch, *Pompey*, 14, 4; Toynbee (1996) 37.

<sup>14</sup> Pliny, *NH*, 8, 7; Dio 39, 38, 2-4; Seneca, *De Brevitate Vitae*, 13, 6; Cicero, *Ad Familiares*, 7, 1, 3; Toynbee (1996) 22-23. Cicero and Pliny in particular stress the negative reaction the crowd had to Pompey's spectacle.

<sup>15</sup> Pliny, *NH*, 8, 7; Dio 43, 23, 3; Appian, *Bellum Civile*, 2, 102; Suetonius, *Julius*, 39, 3; Toynbee (1996) 47-48.

<sup>16</sup> Dio 45, 13, 4; Scullard (1974) 197-98.

- <sup>17</sup> Florus 2, 34.
- <sup>18</sup> Horace, *Epistulae*, 2, 1, 196: Jennison (1937) 66.
- <sup>19</sup> Pliny, *NH*, 8, 7.
- <sup>20</sup> Dio 66, 25: Martial, *De Spectaculis*, 17, 19: Toynbee (1996) 48.
- <sup>21</sup> *SHA*, *Antoninus Pius*, 10, 9: Toynbee (1996) 18.
- <sup>22</sup> *SHA*, *Commodus*, 8, 5: Dio 73, 10; 18-19: Toynbee (1996) 22, 346, n. 40.
- <sup>23</sup> Toynbee (1996) 53.
- <sup>24</sup> Dio 80, 9, 2: *SHA*, *Gordiani Tres*, 33, 1, 2; *Aurelianus*, 33, 4: Toynbee (1996) 16, 19.
- <sup>25</sup> Burstein (1992) 55-56. In late antiquity the term 'India' was often used to refer to the kingdom of Aksum in Ethiopia, as in the present instance.
- <sup>26</sup> Scullard (1974) 259.
- <sup>27</sup> Toynbee (1996) 352, n. 114.
- <sup>28</sup> Cicero, *Ad Familiares*, 7, 1, 3: Pliny, *NH*, 8, 1.
- <sup>29</sup> Toynbee (1996) 39-46: Keller (1913) Vol. 1; 379.
- <sup>30</sup> Dio 88, 7, 4: Scullard (1974) 199.
- <sup>31</sup> *SHA*, *Aurelian*, 5, 6: Strabo 15, 1, 41.
- <sup>32</sup> Galen, *On Anatomical Procedures*, 7, 10: Scarborough (1985) 125.
- <sup>33</sup> Suetonius, *Julius*, 37, 2: Dio 43, 23, 3: Toynbee (1996) 47.
- <sup>34</sup> Toynbee (1996) 48-49: For elephants on tightropes see Seneca, *Epistulae Morales*, 85, 41; Dio 61, 17; Suetonius, *Nero*, 11, 2; *Galba*, 6, 1; Pliny, *NH*, 8, 2-3: For dancing elephants see Martial, *Epigrams*, 1, 104, 9-10; Aelian, *De Natura Animalium*, 2, 11.
- <sup>35</sup> Pliny, *NH*, 8, 2: Aelian, *De Natura Animalium*, 2, 11: Toynbee (1996) 48.
- <sup>36</sup> Aelian, *De Natura Animalium*, 2, 11.
- <sup>37</sup> Plutarch, *Moralia*, 968: Keller (1913) Vol. 1; 380.
- <sup>38</sup> Pliny, *NH*, 8, 3.
- <sup>39</sup> Arrian, *Indica*, 14, 5-9.
- <sup>40</sup> Pliny, *NH*, 8, 7.
- <sup>41</sup> Jennison (1937) 143, n. 1. The 12th century Byzantine writer Manuel Philes, likely drawing upon much earlier sources, also suggests that beer, wine, and other foodstuffs were used to mollify captured elephants: see Phile, *De Elephantate*, 139-42.
- <sup>42</sup> Pliny, *NH*, 8, 7: Jennison (1937) 143.
- <sup>43</sup> *III Maccabees*, 5, 1-2: Josephus [*Contra Apion*, 2, 53], writing about the same event, merely records that Ptolemy ...*bestias ipsas inebriasset*.
- <sup>44</sup> *I Maccabees*, 6, 34-35.
- <sup>45</sup> Scullard (1974) 187-88.
- <sup>46</sup> Aelian, *De Natura Animalium*, 13, 8. Philes states that wine made from lotus, wild rice, and palm dates was used to prepare elephants for battle (...ὥς ἂν ὁ θυμὸς ἀκρατῶς ὑποζέων ἀντιστατικῶς καρδιώττειν ὀτρύνῃ...): Philes, *De Elephantate*, 145-51.
- <sup>47</sup> Hanson (1990) 130-31.
- <sup>48</sup> Pliny, *NH*, 8, 8: Aristotle, *Historia Animalium*, 9, 610a.
- <sup>49</sup> Aelian, *De Natura Animalium*, 4, 24.
- <sup>50</sup> Arrian, *Indica*, 13-14: Strabo 15, 1, 42-43: Scullard (1974) 55-58.
- <sup>51</sup> Pliny, *NH*, 8, 8.
- <sup>52</sup> Timothy of Gaza, *De Animalibus*, 25.
- <sup>53</sup> *FGH* 3 (Leiden: 1964) 146, frag. 51b: Plutarch, *De Sollertia Animalium*, 977D.
- <sup>54</sup> Aelian, *De Natura Animalium*, 10, 10.
- <sup>55</sup> Lucretius 2, 536-40.
- <sup>56</sup> De Angelis D'Ossat (1942) 6-7. The author also records the discovery of an African elephant tooth in Ostia, and suggests that all of these bones may have been imported to Italy in antiquity as animal 'souvenirs': I prefer to see them as remains of living creatures who died in Ostia, perhaps en route to the imperial elephant-enclosure in Laurentum.

- <sup>57</sup> *Panegyrics*, 12(2), 22, 5: Scullard (1974) 205.
- <sup>58</sup> Scullard (1974) 125.
- <sup>59</sup> Polybius 5, 84: Pliny, *NH*, 8, 9.
- <sup>60</sup> Scullard (1974) 25: Hughes (1996) 98. Based upon DNA testing performed on a captive forest elephant in Paris, it is now thought that these creatures form a separate species from the more familiar African bush elephant, rather than merely being a subspecies as previously believed: see Day (2000) 15.
- <sup>61</sup> Scullard (1974) 62-63.
- <sup>62</sup> Solinus 25: Themistius, *Orationes*, 10, 140: Scullard (1974) 30-31. Since Roman geographical terms, such as 'Libya' and 'Mauretania' are rather vague, it is impossible to determine which particular areas of North Africa are meant by these references.
- <sup>63</sup> Rostovtzeff (1963) 335-38: Bertrand (1987) 227-28: Toynbee (1996) 53: Becatti (1953) 69-70, n. 95.
- <sup>64</sup> Aurigemma (1940) 78-79.
- <sup>65</sup> Aurigemma (1940) 67.
- <sup>66</sup> Aurigemma (1940) 82-84.
- <sup>67</sup> Themistius, *Orationes*, 10, 140: Aurigemma (1940) 84.
- <sup>68</sup> Aurigemma (1940) 73.
- <sup>69</sup> Pliny, *NH*, 8, 11.
- <sup>70</sup> Aurigemma (1940) 73-74.
- <sup>71</sup> Aurigemma (1940) 77, n. 1: For the voyage of Hanno in the ancient sources see Herodotus 4, 191; Diodorus Siculus 3, 10, 5.
- <sup>72</sup> Aurigemma (1940) 76.
- <sup>73</sup> Aurigemma (1940) 77.
- <sup>74</sup> Appian, *Lib.*, 9.
- <sup>75</sup> Aurigemma (1940) 75.
- <sup>76</sup> Plutarch, *Pompey*, 12.
- <sup>77</sup> Florus 2, 13, 67: Aurigemma (1940) 76.
- <sup>78</sup> Aurigemma (1940) 77.
- <sup>79</sup> Symmachus, *Epistulae*, 2, 76; 7, 122: Themistius, *Orationes*, 10, 140: Isidorus, *Etymologiae*, 14, 5, 12: Frank (1959) Vol. 4; 117.
- <sup>80</sup> Bertrand (1987) 227.
- <sup>81</sup> *SHA*, *Aurelian*, 5, 6: Burstein (1992) 55, n. 5.
- <sup>82</sup> Aelian, *De Natura Animalium*, 10, 1: Jennison (1937) 141: the 'Mauretanian method' of hunting elephants may be the use of pits to capture them as attributed to the Africans by Pliny (*NH*, 8, 8).
- <sup>83</sup> Mielsch (1994) 69-70.
- <sup>84</sup> Mielsch (1994) 70-71: for the games of 248 see *SHA*, *Gordian*, 33, 1; for earlier *venationes* of the late second and early third centuries see Dio, 73, 10, 3; 67, 1, 3; 68, 6, 2; 80, 9, 2.
- <sup>85</sup> Weeber (1994) 23, Pl. 31.
- <sup>86</sup> St. Ambrose, *Hexameron*, 6, 5, 30f: Cassiodorus, *Variae*, 10, 30: Scullard (1974) 233-35, 252.
- <sup>87</sup> Burstein (1992) 55-56: Whitehouse (1991) 277: For the games of 496 see Timothy of Gaza, *On Animals*, 24 and Marcellinus Comes, *Chronicon*, *Chronica Minora Saec*, IV, V, VI, VII, in T. Mommsen, ed., *Monumenta Germaniae Historiae*, Sec. 1, Vol. 11 (Berlin 1894) 94; for Aksum's monopoly on elephants see Cosmas Indicopleustas, *Christian Topography*, 11, 339.
- <sup>88</sup> Scullard (1974) 235.

### *Lions:*

Apart from their appearances in Roman *spectacula*, lions, likely because of their 'regal' nature and intelligence, were apparently sometimes kept as pets by Roman notables, such as the emperors Caracalla and Elagabalus.<sup>1</sup> At least in the first and second centuries AD, however, such a practice was evidently not exclusively confined to the Roman elite, even discounting the somewhat dubious tale of Androclus and his lion.<sup>2</sup> Epictetus writes of men raising lions in captivity and even taking them out in public with them as if it was a relatively common occurrence.<sup>3</sup> Juvenal attacks a certain Numitor for spending his money on his tame lion rather than his friends.<sup>4</sup>

The lions used by the Romans in various displays and *venationes* appear to have been imported originally from throughout the non-European section of the empire, comprising such areas as Africa, Syria, and Mesopotamia. Sulla exhibited 100 maned lions from Mauretania in Rome in 93 BC, while the animals imported by Gaius Cassius, and held up in Megara due to the political chaos prior to the battle of Phillipi (42 BC), likely hailed from Syria, where Cassius had previously served as quaestor.<sup>5</sup> At least some of the lions owned by Caracalla were imported from Parthia, judging by the Persian-derived name (Ἀκινάκης) of the emperor's favourite.<sup>6</sup> Such animals, in small numbers, may also have been obtained from Thessaly: Themistius records their existence in that region as late as the fourth century AD.<sup>7</sup>

The previously-mentioned imperial edict of the fifth century allowing provincials to kill troublesome lions explicitly forbids them from hunting and selling the animals, thereby preserving the imperial monopoly on the lion-trade.<sup>8</sup> One possible cause of this monopoly may have been a shortage of lions, at least in the later empire, which led to restrictions on any private trade in such animals in order to ensure an adequate supply for the emperors. This supposition appears to be confirmed by the fact that the contemporary aristocrat Symmachus was forced to

obtain imperial permission before he could even stage a *venatio* of *ferae Libycae* in Rome.<sup>9</sup>

It should however be noted that if the lion population available for the spectacles of the later empire had been in truly dire straits, the imperial edict in question would in all likelihood have banned the killing of lions, even in 'self-defence'. Economic motives may well have influenced this edict: by forbidding others to sell lions, as opposed to killing them, the emperors may well have wanted to keep their monopoly on the lucrative trade in these animals. In fact, by the late empire lion populations appear to have been significantly reduced in the Atlas Mountains and wiped out in western Asia Minor, although they continued to exist in other regions such as Syria.<sup>10</sup>

Other ancient sources allude to the disappearance of lions elsewhere in the empire, although this may not have been caused by the *spectacula*. While Pausanias records the presence of lions in Thessaly in the second century AD, the fourth century orators Themistius and John Chrysostom both complain about the reduced population of such animals in that region.<sup>11</sup> Although Thessaly was not evidently one of the primary hunting-grounds for lions used in the *spectacula*, surrounding regions may well have procured at least some of their lions there in order to avoid the undoubtedly large fees for having such animals shipped from Africa or even Syria. It should be noted however that the *spectacula* appear to have at worst exacerbated a preexisting problem: Aristotle records that the population of lions in nearby Thrace was already seriously depleted in his own day.<sup>12</sup>

Other ancient evidence suggests that the supply of lions for various late imperial *spectacula*, although apparently reduced, had not completely dried up. Probus (276-82) is said to have imported 100 lions from Africa and 100 from Syria for his *venatio* in Rome, while both Symmachus and Stilicho at later dates were apparently involved in importing lions from Africa. The late imperial poet Claudian also describes a massive lion en route from Africa to Italy, a particular animal which,

if fictional, nonetheless suggests that such trade was still taking place at that time.<sup>13</sup> However, the lion presented to the emperor as a gift from eastern barbarians on the Barberini diptych in all likelihood came from the east rather than Africa.<sup>14</sup> A fifth century mosaic *emblema* from Antioch, depicting a lion wearing a Persian ribbon on its neck may even imply that the Romans imported such animals from the Sassanids.<sup>15</sup>

Perhaps because of lions' ubiquitousness in Roman *spectacula*, authors such as Oppian record a relatively large amount of information about methods used to capture them. Pliny records that lions were at one time captured primarily by pitfalls, a method which he suggests was at least partially superseded by the use of cloaks thrown over the head of charging lions in order to 'sedate' them.<sup>16</sup> At a later date Oppian records a method of lion-capture attributed to the Libyans of his day. After digging a deep pit and surrounding it with a fence or wall, the hunters would erect a post in the centre of the pit, to which was attached a lamb or kid. The lion, attracted by the cries of the animal, would leap the barricade surrounding the pit and thereby become trapped in it. A cage containing meat could then be lowered into the pit to trap the lion.<sup>17</sup>

According to Oppian, hunters on the Euphrates used nets rather than pits to capture such animals. Three hunters would wait in ambush by a large semicircular net affixed to stakes, while some of their comrades went in search of lions. Once the animals had been located, hunters mounted on native horses, which were supposedly the only ones brave enough to perform such a task, would pursue the lions, followed closely by hunters on foot banging their shields and brandishing torches. The animals, frightened by the flames and noise, could be easily directed into the waiting net.<sup>18</sup>

Although Oppian suggests that this particular technique of capture was restricted to the Near East, other evidence indicates that it was in fact widespread within the Roman empire. A Roman mosaic from Algeria, dating to approximately AD



300, depicts a scene closely reminiscent of Oppian's description (Fig. 29). The mosaic shows two mounted hunters, armed with spears and shields, pursuing a number of animals including lions, leopards, ostriches, and beisa antelope towards a waiting net strung on a fence behind prickly ficus. Between the two horsemen advances a lone hunter, similarly armed, on foot. A line of hunters crouched behind their shields and brandishing torches blocks the animals' escape in their direction. At the moment the scene is supposed to occur, the animals have just realized their predicament: one unfortunate hunter has been turned on by one of the leopards. At one end of the net a waiting cage stands open, with a group of hartebeests standing just behind it. Presumably the animals would be attracted one by one into the cage by the sight of these animals through its bars. Other empty cages stand at the edge of the scene, ready to replace the others as they are filled. Two groups of Barbary sheep and wild asses collected in clearings behind the hunters may be intended as additional bait for these cages, or may represent animals already captured.<sup>19</sup>

The most unusual method recorded by Oppian was one practiced in Ethiopia. A group of four men, wearing armour, wielding whips, and hiding behind large shields, would surround the entrance to a lion's lair and drive the angry animal out by their shouting. The animal would exhaust itself in attacking their locked shields, after which it was easily subdued and bound up.<sup>20</sup> Although Jennison strongly doubts the veracity of this account, he makes the somewhat paradoxical comment that Oppian's account closely resembles the modern-day Masai lion hunt in Africa, except that they use spears instead of whips.<sup>21</sup> Some confirmation of the use of the whip-technique in antiquity can also be found in the *Cestes* of Julius Africanus. Africanus describes a group of soldiers, brandishing torches and with their shields interlocked, forming a semi-circle around the mouth of a lion's den. After frightening the lion out of its den with horns and shouting, the soldiers are then able to drive it into a waiting cage. A similar scene, complete with the recommended goat in the cage, is depicted on the far left side of the 'Great Hunt' mosaic from Piazza Armerina,

although the soldiers carry spears rather than torches, and the quarry in this case is leopards rather than lions.<sup>22</sup> One of the wall-paintings from the now-destroyed Tomb of the Nasonii in Rome also depicts a group of five hunters, arranged in a line behind their interlocking shields, confronting a pair of enraged lions. One of the lions has evidently broken up another section of this human wall: he stands on top of one of the huntsmen while two others cower behind their shields. The line of netting depicted in the background of the scene, however, may have been intended as a backup barricade should such a mishap occur.<sup>23</sup>

The first securely recorded display of lions in Rome was that of Marcus Fulvius Nobilior in 186 BC, followed by the *spectaculum* of the aediles Crassus and Scaevola in 104 BC, which apparently featured lions in combat for the first time. It is unclear whether or not the 63 *Africanae bestiae* exhibited in the Circus Maximus in 169 BC included lions or not. The earliest exhibition of maned lions in Rome took place at the spectacle staged by Sulla during his praetorship.<sup>24</sup> Lions featured prominently in *spectacula* staged by both Pompey and Caesar: in 55 BC Pompey's show included 315 maned and 285 maneless lions, while the latter's triumph in 46 BC featured 400 lions, amongst other animals. The 300 African animals exhibited by the praetor Publius Servilius in 25 BC may well also have included lions.<sup>25</sup>

As might be expected, lions also played an important role in the even larger *venationes* staged during the imperial period. Numerous representations of lions in the amphitheatre survive from this time, including mosaics from Ostia depicting fawn-eating lions wearing the characteristic decorative neck and body straps of the arena.<sup>26</sup> At least 460 lions, and likely many more, were killed in various *venationes* during Augustus' reign, while the 700 Libyan animals slaughtered during the reigns of Caligula and Claudius probably included such animals as well.<sup>27</sup> Nero is specifically credited by Dio with the death of 300 lions in spectacles held during his reign: the massive *venationes* staged by Titus and Trajan in all likelihood included the death of many more lions as part of the general butchery.<sup>28</sup>

Hadrian's *spectacula* often featured over 100 lions, as did one staged by his successor Antoninus Pius in 149, although it is unclear in the latter case whether or not they were destroyed as part of the show.<sup>29</sup> In addition, lions were amongst the animals said to have been personally slaughtered by Commodus, and also figured prominently in the elaborate 'ship' *venatio* put on by Septimius Severus.<sup>30</sup> The 100 *ferae Libycae* said to have been exhibited by the elder Gordian as aedile under Severus may also have included lions. Philip the Arab is said by the *Scriptores Historiae Augustae* to have included 100 lions of various types in his *venatio* staged for the Secular Games in 248, while 400 lions were involved in a spectacle under Probus in 281.<sup>31</sup> A fourth century inscription from the site of Sagalassus in Pisidia honours a certain Tertullus for staging a beast-hunt including bears, leopards, and lions, thereby indicating that even small communities at that relatively late date were staging *venationes* involving the latter animals.<sup>32</sup> As late as 521, the lavish games staged by Justinian as consul in Constantinople included twenty lions.<sup>33</sup>

The evidence of ivory diptychs and pyxides in the later empire provides further indication that the use of lions in *venationes* continued well into the sixth century, particularly in the eastern empire. A diptych carved in Rome around 435 depicts a single *venator* in combat with five lions, while another from the eastern empire, carved around 450, depicts eight *venatores* fighting sixteen maned and maneless lions (Fig. 55). The diptych of Aerobindus from 506 shows five men fighting four lions: that of Anastasius, carved in Constantinople in 517, depicts two lions driving three *venatores* to flight.<sup>34</sup>

Perhaps because of their 'regal' attributes, lions were also featured in non-violent displays in the amphitheatre and elsewhere. Lions, like elephants, were commonly associated with the divine in antiquity, in particular with the goddess Cybele. Such animals were often depicted as drawing the chariot of the goddess, an image that leading Romans like Faustina and Julia Domna emulated by having themselves shown as being conveyed by lion-drawn chariots on their coinage.

Numerous Roman emperors from Trajan onwards depicted themselves lion-hunting on issues of their coinage, alluding to the regal connotation of this sport as practiced by earlier monarchs, most notably Alexander the Great.<sup>35</sup>

One of the unpopular actions Antony took in Rome, while Caesar was campaigning in the east in 48-47 BC, was to have himself and the actress Cytheris pulled by a lion-drawn chariot in public.<sup>36</sup> On more than one occasion the ancient sources record public disapproval at a lion's death in the arena, such as the displeasure which the *venatio* staged by Probus in 281 provoked in the audience.<sup>37</sup> One of Seneca's letters suggests that non-violent displays involving lions were not at all rare. In the passage in question, Seneca contrasts the two types of lions to be seen commonly in the arena: the wild lion, fierce in combat, and the lion trained to wear gilded decoration on its mane, which Seneca calls *languidus*.<sup>38</sup> Although at least one commentator on this passage has speculated that these lions were pitted in combat against each other, only the former animal is described as actually fighting in the arena by Seneca.<sup>39</sup> It is perhaps more likely that the lion with the gilded mane simply performed tricks or paraded in public: a combat between this 'languid' animal and its fierce cousin would not present much of a spectacle for the Roman public.

Several of Martial's epigrams are concerned with lions trained to grasp hares in their mouths without injuring them, while another concerns a supposedly docile trained lion who went berserk and killed two attendants in the amphitheatre.<sup>40</sup> An extant Latin grave inscription from Rome records a lion-trainer of the type whom might have been involved in the non-violent displays recorded by Martial. The individual's name, Ctesipon, suggests that he, as well as some of his lions, might have been Persian by birth.<sup>41</sup>

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Notes:

<sup>1</sup> Seneca, *De Ira*, 31, 6; Epictetus 4, 1, 25; Juvenal 7, 75-77; Dio 78, 7, 2; SHA, *Elagabalus*, 21, 25; Toynbee (1996) 63-64.

<sup>2</sup> Aulus Gellius, *Atticae Noctes*, 5, 14.

- <sup>3</sup> Epictetus 4, 1, 25.
- <sup>4</sup> Juvenal 7, 74-78.
- <sup>5</sup> Pliny, *NH*, 8, 20: Seneca, *De Brevitate Vitae*, 13, 6: Plutarch, *Brutus*, 8, 4: Toynbee (1996) 61.
- <sup>6</sup> Dio 79, 7, 2: Keller (1913) Vol. 1; 29.
- <sup>7</sup> Themistius, *Orationes*, 10, 140: Keller (1913) Vol. 1; 35.
- <sup>8</sup> *CT* 15, 11, 1. The date at which the imperial monopoly on lions came into being is uncertain: Ville (1981) [351, n. 22] maintains that the first explicit reference to this monopoly dates from the reign of Commodus [Dio 73, 14, 1], when the emperor executed a certain Julius Alexander for killing a lion from horseback. As Cary suggests, however, this execution may have been brought about due to Commodus' jealousy of Alexander's hunting prowess rather than the illegal killing of a lion [See Cary (1961) 101, n. 1]. Earlier depictions of emperors such as Trajan hunting lions do not necessarily prove the contemporary existence of an imperial monopoly on lions, but may merely be concerned with 'proclaiming' the emperor's *virtus*: As Ville (1981) [351] suggests, the monopoly was likely not caused by a shortage of lions to go around, but the idea that only an emperor was fit to hunt the noble lion. Since, as we shall see, lions are listed as a saleable commodity in Diocletian's Price Edict, it is possible that the imperial monopoly on lions only came into effect after this document's publication.
- <sup>9</sup> Symmachus, *Epistulae*, 2, 46; 4, 12; 7, 59, 122.
- <sup>10</sup> Hughes (1996) 106. Lions in fact were still to be found in an area stretching from the Taurus mountains to Aleppo as late as the 19th century: see Brice (1978) 141.
- <sup>11</sup> Keller (1913) Vol. 1; 35.
- <sup>12</sup> Keller (1913) Vol. 1; 34-35.
- <sup>13</sup> *SHA*, *Probus*, 19: Symmachus, *Epistulae*, 2, 76: Claudian, *De Consulatu Stilichonis*, 3, 333-38, 357-58: Toynbee (1996) 61.
- <sup>14</sup> *CT* 15, 11, 1: Pharr (1969) 436: Toynbee (1996) 65.
- <sup>15</sup> Toynbee (1996) 69.
- <sup>16</sup> Pliny, *NH*, 8, 21.
- <sup>17</sup> Oppian, *Cynegetica*, 4, 77-111: Jennison (1937) 142.
- <sup>18</sup> Oppian, *Cynegetica*, 4, 112-46.
- <sup>19</sup> Jennison (1937) 145: Loisel (1912) 96-98.
- <sup>20</sup> Oppian, *Cynegetica*, 4, 147-211.
- <sup>21</sup> Jennison (1937) 146, n. 1.
- <sup>22</sup> Marrou (1978) 273-75.
- <sup>23</sup> Marrou (1978) 277-78.
- <sup>24</sup> Livy 39, 22, 1, 2; 44, 18, 8: Pliny, *NH*, 8, 20: Seneca, *De Brevitate Vitae*, 13, 6: Toynbee (1996) 17. According to Jennison [(1937) 186] the term *leopardus* was not used by the Romans to denote a leopard, but rather a variety of lion whose males were almost or completely maneless, commonly thought to result from the mating of a lion and leopard.
- <sup>25</sup> Pliny, *NH*, 8, 20: Suetonius, *Julius*, 37, 2: Dio 43, 22, 23; 53, 27, 6: Toynbee (1996) 18: Messineo (2000) 63, fig. 64.
- <sup>26</sup> Toynbee (1996) 68.
- <sup>27</sup> Toynbee (1996) 21.
- <sup>28</sup> Dio 59, 7, 3; 60, 7, 3; 61, 9, 1; 66, 25, 1; 68, 15: Toynbee (1996) 21-22.
- <sup>29</sup> *SHA*, *Hadrian*, 19, 3; 19, 7; *Antoninus Pius*, 10, 9: Toynbee (1996) 18: Keller (1913) Vol. 1; 33.
- <sup>30</sup> Herodian 1, 15, 5, 6: Dio 76, 1: Toynbee (1996) 18, 22.
- <sup>31</sup> *SHA*, *Gordiani Tres*, 3, 6, 7; 33, 1, 2; *Probus*, 19: Toynbee (1996) 16, 18-19.
- <sup>32</sup> *C.I.* 4377: Keller (1913) Vol. 1; 33.
- <sup>33</sup> Marcellinus Comes, *Chronicon*, 14: Loisel (1912) 142.

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<sup>34</sup> Toynbee (1996) 63; Delbrueck (1926-29) nos. 9, 21, 37, 60; Volbach (1976) 32-33, n. 8; 36-37, n. 21; 43, n. 36; 53, n. 59; 74, n. 102.

<sup>35</sup> Anderson (1985) 78-80; Keller (1913) Vol. 1; 40-43.

<sup>36</sup> Plutarch, *Antony*, 9, 4-5; Jennison (1937) 56. Apart from this particular episode, Antony often associated himself with lions (by minting coins depicting such animals, for example), and was linked with lions by his contemporaries: see Pelling (1988) 139.

<sup>37</sup> *SHA*, *Probus*, 19; Toynbee (1996) 19, 62; See also Statius, *Silvae*, 2, 5.

<sup>38</sup> Seneca, *Epistulae Morales*, 41, 6.

<sup>39</sup> Gummere (1989) Vol. 1; 276-77.

<sup>40</sup> Martial, *Epigrams*, 1, 6; 14; 22; 44; 48; 51; 60; 104: 2, 75; Toynbee (1996) 62-63.

<sup>41</sup> CIL 6, 30134; *Anthologia Latina*, 1257; Keller (1913) Vol. 1; 29.

### *Tigers:*

The tigers, or more often tigresses, imported for *spectacula* by the Romans were obtained from a far more restricted geographical area than were lions. Pliny records the tiger as being native to Hyrcania and India, while Virgil refers to Armenian tigers drawing the chariot of Dionysus. As Toynbee suggests, the relatively confined area from which the Romans appear to have obtained their supply of tigers may well explain why they appear to have featured infrequently in Roman spectacles.<sup>1</sup>

Although an Indian embassy presented Augustus with some tigers on the island of Samos in 20-19 BC, the first such animal who survived to reach Rome was apparently the one exhibited there by Augustus in 11 BC, as part of the celebrations for the dedication of the Theatre of Marcellus. This tiger was evidently not the same one which was put on public display by Augustus along with other exotic animals in various locations throughout the city: Suetonius specifically records that these animals were displayed ...*citra spectaculorum dies*... The next tigers displayed in Rome were four in a single show under Claudius, seemingly considered a noteworthy event by Pliny, likely because of the numbers involved, and at least one by Nero. Plutarch's anecdote concerning a caged tiger may or may not refer to one of Claudius or Nero's animals.<sup>2</sup> To judge by a passage from Petronius' *Satyricon* (see page 133), tigers were pitted against human opponents (or perhaps condemned criminals) at least as early as the reign of the latter emperor, although this passage as well could theoretically refer to the tigers exhibited by Claudius.<sup>3</sup>

The next emperor specifically credited by the ancient sources with displaying these animals in Rome is Domitian, who is said to have exhibited a large number of tigers in the Colosseum upon his return to Rome in 93 from the Sarmatian war.<sup>4</sup> Despite Martial's hyperbole, the actual number of tigers on this occasion may not have actually been very large, since, as we have seen, Pliny thought the four tigers

displayed by Claudius to be an amount worthy of note. Although some scholars, supposing that tigers at this time still existed west of the Volga, have speculated that the Sarmatians themselves presented Domitian with these animals as a token of submission, it appears unlikely that Martial would have failed to mention this fact if it were indeed the case. The animals in all likelihood came from India, where, according to Martial, the *Gangeticus raptor* was active in hunting such animals.<sup>5</sup>

Antoninus Pius is said to have exhibited an unspecified number of tigers in one of his *venationes* in 149, while Commodus apparently included a tiger in the group of animals that he killed in public.<sup>6</sup> Plautian's funeral in 205 featured the killing of ten tigers, while, according to Dio, the unprecedented number of 51 were slaughtered for Elagabalus' wedding. This relatively modest figure seems to reflect just how limited the Romans' supply of tigers really was, in comparison to that of other animals. Philip the Arab is said to have exhibited 10 tigers as part of the Secular Games in 248, while, in the last recorded imperial exhibition of these animals, four tigers participated in Aurelian's triumph of 274.<sup>7</sup>

Perhaps because of the evident difficulty in procuring tigers for the games, Roman authors appear to have been inordinately interested in the supposed methods used to capture these animals. Both Pliny and Martial mention the capture of tiger cubs by horsemen. Pliny states that the hunter, after locating a tigresses' lair, would wait for the animal to leave, before entering and stealing a number of her cubs. The tigress would soon discover their absence and pursue the hunter. The latter, while fleeing back to a waiting ship, would have to drop some of the cubs he had stolen, one by one, to slow up the pursuing tigress until he was safely on board with the remaining young.<sup>8</sup> Martial's use of the term *raptor*, rather than *venator*, for the tiger-hunter also suggests that this individual snatched tiger cubs rather than capturing full-grown tigers in nets or cages. The fact that Martial describes the 'stereotypical' tiger-hunter as a *Gangeticus raptor* on a Hyrcanian horse suggests not only that most of the Romans' tigers came from southeast of the Caspian Sea, but also



that the natives of these regions, rather than the Romans themselves, were predominantly responsible for obtaining them.

A mosaic from Antioch, dating to approximately 500, depicts the capture of a young tiger, with a mounted huntsman dropping a cub behind him to delay a tigress and two other cubs hot on his heels (Fig. 56). Another mosaic from Cyrene likewise depicts a mounted hunter about to drop a tiger cub in front of a pursuing tigress. One of the paintings from the Tomb of the Nasonii shows a hunter on foot dropping a tiger cub and raising his shield to cover the retreat of three of his mounted comrades, pursued by two tigers, onto the gangplank of a waiting ship.<sup>9</sup> Contra Aymard, however, the relative frequency of such depictions and descriptions of tiger-hunting does not necessarily mean that this technique of capture was actually practiced by the Romans, only that the imagined technique was popular with Roman artists and writers.<sup>10</sup>

Another similar method of capturing tiger cubs, as described by Claudian and St. Ambrose, involved the use of a mirror, rather than an actual cub, to delay the pursuing tigress. The mounted huntsman would drop a mirror on the ground behind him, which the tigress would pause over, thinking her reflection in the mirror to be one of her lost cubs.<sup>11</sup> In the passage in question, Claudian mentions that the cubs are being stolen for the Persian king, which perhaps suggests that this method of capture was devised by the Persians themselves. The Persians, given their geographical proximity to the tigers' homeland in the area of the Black and Caspian seas, presumably had much more contact and experience with the animals than the Romans did. This passage may even imply that the Persians also were involved in the tiger trade, as indeed they may have been with the trade in lions.

Although the 'mirror method' of catching tigers, as described by Claudian, may appear so fanciful as to be an invention of the poet's, artistic evidence from the Roman world supports the idea that tigers were captured, or at least were commonly thought to be captured, in this manner. Jennison, while dismissing the 'cub-

dropping' technique of tiger capture described by Pliny and Martial, concedes that the mirror technique may actually have been used with tigers and even other animals. The tiger, however, would see the image in the mirror as an enemy rather than its own cub, meaning that the mirror might turn the pursuing tiger to flight rather than merely delay it.<sup>12</sup>

A scene from the 'Great Hunt' mosaic in Piazza Armerina depicts a scene quite similar to that described by Claudian, with a mounted huntsmen fleeing onto a ship with a tiger cub while its mother stops to look into a discarded mirror on the ground. A Roman sarcophagus relief shows virtually the same scene, although if the two felines in pursuit of the hunter are meant to be tigresses, they are missing both their stripes and udders. As Toynbee states, however, the former omission may merely be due to the limitations of the artistic medium involved.<sup>13</sup>

The description of tiger-hunting given by Oppian, while quite brief, appears to be a more accurate account of the technique used to capture such animals than that given by Pliny. According to the former account, hunters did grab tiger cubs, but did not then flee to a waiting ship. The cubs were used rather to lure the irate mother into a waiting net.<sup>14</sup> The fact that hunters performing this dangerous manoeuvre often might have dropped one of the cubs they were carrying perhaps led to the common misconception that such cubs were dropped on purpose in order to slow up the pursuing mother. Another Roman misconception that may well have originated with this technique of capture was that all tigers were females who mated with the west wind. As Oppian states, this error was likely caused by the small number of full-grown male tigers captured by hunters: at first sight of such men, the male tigers would routinely flee, while the females, because of the maternal bond with their offspring, would follow their cubs even into a net.<sup>15</sup>

The accumulated Roman evidence for tiger-hunting indicates that it was much more of an 'ad hoc' affair than the techniques used to capture other types of animals for the *spectacula*. Nowhere, for instance, do we hear of or see the use of cages or

well-organized and armed groups of hunters: instead lone huntsmen grab tiger cubs and flee for their lives on horseback. The whole procedure has more of the character of a hit-and-run raid than a planned hunting expedition. To judge from the evident rarity of tiger appearances in Roman spectacles, it appears that they were encountered only rarely by Roman hunters in pursuit of other animals, which is not at all surprising considering that the range of the tiger in antiquity largely lay outside of Roman territory, except perhaps for Armenia.<sup>16</sup> Specific expeditions to capture tigers were therefore unlikely to have been formally planned from the outset. Hunters may have merely taken the opportunity to steal a few tiger cubs and take them back to their ships with other captured animals when they became aware of tiger dens in the area they were active in. The captured cubs were presumably raised to maturity in imperial enclosures like the one(s) known to have existed at Laurentum. Seneca suggests that tigers, like lions or elephants, were one of the animals which could be trained quite easily (...*osculatur tigrim suus custos...*), but to judge by the relatively small number of tigers which are recorded as appearing in Roman spectacles, they had a high mortality rate while in captivity.<sup>17</sup>

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Notes:

<sup>1</sup> Pliny, *NH*, 8, 25; Virgil, *Eclogues*, 5, 29, 30; Toynbee (1996) 70-71.

<sup>2</sup> Dio 54, 9, 8; Pliny, *NH*, 8, 24; Seneca, *Epistulae Morales*, 85, 41; Suetonius, *Augustus*, 43, 4; Plutarch, *De Sollertia Animalium*, 20 (974 C); Ville (1981) 110-11; Toynbee (1996) 70-71; Merten (1991) 142:

<sup>3</sup> Petronius, *Satyricon*, 119, 16ff; Merten (1991) 142.

<sup>4</sup> Martial, *Epigrams*, 8, 26.

<sup>5</sup> Jennison (1937) 76-77.

<sup>6</sup> *SHA*, *Antoninus Pius*, 10, 9; *Commodus*, 8, 5; Dio 73, 10; 18-19; Toynbee (1996) 18, 22, 71.

<sup>7</sup> Dio 76, 7, 5; 80, 9, 2; *SHA*, *Gordiani Tres*, 33, 1, 2; *Aurelian*, 33, 4; Toynbee (1996) 16, 19, 71.

<sup>8</sup> Martial, *Epigrams*, 8, 26; Pliny, *NH*, 8, 25; Toynbee (1996) 72.

<sup>9</sup> Toynbee (1996) 72, 359, n. 84; Messineo (2000) 51, fig. 49.

<sup>10</sup> Aymard (1951) 441-42.

<sup>11</sup> Claudian, *De Raptu Proserpinae*, 3, 263-68; Ambrose, *Exameron*, 6, 4; Toynbee (1996) 72, 81.

<sup>12</sup> Jennison (1937) 147.

<sup>13</sup> Toynbee (1996) 72, 81.

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<sup>14</sup> Oppian, *Cynegetica*, 3, 357-63

<sup>15</sup> Jennison (1937) 147-48.

<sup>16</sup> Marrou (1978) 281.

<sup>17</sup> Seneca, *Epistulae Morales*, 85, 41.

*Other Felines:*

Other wild cats besides lions and tigers did occasionally make an appearance in Rome and other centres, particularly at an early date. Leopards and cheetahs, both of which were displayed by Ptolemy II in the Hellenistic period, were available from Africa and Asia. Tame specimens of the latter animals in Africa were apparently used in conjunction with hunting dogs to capture other wild animals as early as the 18th Dynasty in Egypt, a practice which continued in North Africa until at least as late as the fifth century AD, judging by a poem by Luxorius.<sup>1</sup> It is not clear from which area Marcus Fulvius Nobilior obtained his leopards (?) (*pantherae*) for the first recorded display of these animals in Rome in 186 BC.<sup>2</sup>

A favoured method of capturing leopards, like lions, apparently involved a group of hunters driving them into ready-made pitfalls.<sup>3</sup> According to Oppian, this technique of leopard capture was quite similar to the 'pit-and-post' method of lion capture discussed previously, except that a puppy, instead of a lamb or kid, was used as bait on the wooden pillar in the centre of the pit. In addition, the genitals of the unfortunate bait were tied down with straps so as to cause it to howl in pain and attract the leopard more easily. In some cases at least the puppy could be quickly pulled up out of the way of the springing leopard, although Oppian does not specify how this was accomplished.<sup>4</sup> Although Oppian clearly distinguishes between the bait used for lions and that used for leopards, this may well be poetic licence on his part: there seems no reason why puppies could not attract lions, or lambs could not attract leopards.

A now lost wall-painting from the Tomb of the Nasonii (Fig. 30) depicted another method of capture which was used for leopards as well as undoubtedly other felines. On the left side of this scene one leopard walks into an open cage while a hunter, armed with spear and shield, crouches on top ready to close the entrance behind the animal. Another group of similarly-armed hunters, protected by their

interlocking shields, flank the cage. The group of hunters dispatching another leopard to the right likely drove the first leopard towards the cage, although it is possible that it was also attracted there by a smaller animal or even a mirror placed within the cage.<sup>5</sup>

A similar technique of 'armed' leopard capture is also depicted in the scene of soldiers capturing leopards on the far left side of the 'Great Hunt' mosaic from Piazza Armerina.<sup>6</sup> Aelian records that the Mauretanians using this technique to capture leopards for the *spectacula* placed a rope snare around a piece of rotten meat in a stone hut, into which the animals would be attracted by the pungent smell of the bait. Such a technique would have also been ideal for capturing lions, since the latter animals, being scavengers, would be even more likely to be attracted by rotten meat.<sup>7</sup>

Another more unusual technique for capturing leopards is recorded by Oppian. According to this account, Libyan hunters would capture such animals by drugging their water-holes. After locating an isolated spring out of which the local leopards would likely drink at dawn, the hunters would pour into it twenty jars of wine. The leopards, attracted by their own thirst as well as the smell of the wine, would drink greedily from the water-hole and then pass out, after which the hunters could round them up without difficulty.<sup>8</sup> In adding the detail that the wine to be used in this technique had to be eleven years old, Oppian appears to be copying a reference of Homer to similarly-aged wine.<sup>9</sup> This may suggest that the technique as a whole is a figment of Oppian's poetic imagination. A similar technique using "intoxicants", however, has been used in recent times to capture smaller animals, which indicates that Oppian's account may not be entirely fictitious.<sup>10</sup>

The *Africanæ* which, according to Pliny, were banned from Italy for a time by a Republican senatorial decree were evidently panthers, or more specifically leopards, which Pliny mentions immediately after his mention of the ban. In the previous chapter of his work Pliny discusses tigers and panthers, but as we have seen, the Romans did not import tigers from Africa, and these animals therefore

would not have been affected by such a ban. Since Pliny refers to the ban as *vetus*, it may have been of long standing even before its repeal prior to 169 BC, when the aediles displayed 63 *Africanæ bestiae*, possibly leopards, in Rome.<sup>11</sup> If the ban on *Africanæ* were in place as early as 186 BC, it would indeed suggest that Nobilior procured his animals from Asia, unless he acted in contempt of the law.

According to Pliny, Marcus Scaurus was the first Roman to exhibit 150 leopards at one time (*primus...Scaurus varias universas misit*) during his aedileship of 58 BC<sup>12</sup> Unfortunately it is not clear from Pliny's wording whether he meant that Scaurus was the first to exhibit leopards in Rome, or merely the first to exhibit as many as 150 at one time. If the former alternative is the correct one, it would of course mean that the *Africanæ bestiae* exhibited in 169 BC were other animals, possibly lions. Since Scaurus at one time had served as governor in Syria, it may well be that his contacts there provided him with the leopards for his spectacle.<sup>13</sup>

Scaurus' exhibition was surpassed first of all by Pompey's 410 leopards in 55 BC, followed by the 420 exhibited by Augustus in 11 BC.<sup>14</sup> The former's leopards, like Scaurus', may have come from the east, since much of Ptolemy's military career was spent there. In the mid first century BC, at least, Cilicia was evidently a noted area amongst the Romans for obtaining these animals. When Cicero became governor there in 51 BC, his associate Marcus Caelius Rufus, running for the aedileship of the next year, pestered him to send leopards for the show he planned to give in Rome upon his election.<sup>15</sup> Presumably Caelius would not have made such a seemingly exorbitant request if he did not think it was within Cicero's power as governor to fulfill it. At a date just prior to Caelius' campaign for the aedileship, Curio had already obtained ten of these animals from Cilicia, as well as a further ten from Africa.<sup>16</sup>

It should nevertheless be noted that at this time the population of leopards in Asia Minor was evidently already under some duress due to the Roman *spectacula*. In one of his letters to Caelius, Cicero noted that the leopards in his province, complaining bitterly since they were the only animals plotted against in the region,

were contemplating a move to Caria.<sup>17</sup> No doubt this euphemism ([*pantheras*]...*constituisse in Cariam ex nostra provincia dedecere*...) referred to the hunting of leopards in Cilicia. Caelius, perhaps aware of the decline of the leopard population in Cilicia, had also urged Cicero to write to Pamphylia for the animals, since Caelius' sources, possibly hunters in his employ, had informed him that more leopards were available in the latter province.<sup>18</sup>

The next recorded involvement of leopards in the Roman *spectacula* is in Martial, most probably as part of the event staged by Titus to inaugurate the Colosseum. In one of his epigrams the poet refers to yoked leopards, as well as other animals, in an arena context.<sup>19</sup> Although it is entirely possible that leopards also figured in the massive *venatio* staged by Trajan, the next specific mention of these animals in such a context dates to the reign of Commodus, when he is said to have personally slain leopards as well as other animals in the arena.<sup>20</sup> One hundred leopards were also included in the elaborate 'ship' *venatio* staged by Septimius Severus over a seven day period.<sup>21</sup>

Septimius Severus is the last emperor specifically credited by the sources with including leopards in his *spectacula*, although vague references to Libyan and Egyptian animals in the *venationes* of later emperors open the possibility that they were also included in the latter events. According to the *Scriptores Historiae Augustae*, Elagabalus kept leopards as pets, although they are not specifically mentioned as participating in any of his public spectacles.<sup>22</sup>

Leopards are a significant omission from the long list of animals said by the author of the *Scriptores Historiae Augustae* to have been collected by Gordian III for the upcoming Secular Games in 248.<sup>23</sup> If this list is at all historically accurate it may indicate a scarcity of these animals for the games in the third century. Even if the list is merely a fabrication of the author, meant to represent what his contemporaries would regard as a 'plausible' collection of animals for such an event,



it still suggests that leopards, at least in Rome, were a rare commodity in his day and age.

Such a situation, however, does not appear to have existed throughout the empire. Leopard *venatio* mosaics such as those found in the Hunting Baths of Lepcis Magna and the house of Magerius in Smirat suggest that such spectacles continued in Roman Africa until at least the third century.<sup>24</sup> A diptych manufactured in the early fifth century also indicates that leopards appeared in *venationes* of the western empire at a late date. The bottom half of one leaf of this diptych shows a *venator* among a group of five such animals (Fig. 57).<sup>25</sup>

These animals were included in eastern spectacles at an even later date: the previously-mentioned spectacle staged by Justinian in 521 included a group of thirty *pardi*, presumably leopards, as part of the entertainment.<sup>26</sup> A diptych of the consul Anastasius manufactured in 517 evidently confirms the appearance of leopards in eastern spectacles at this late date: in the bottom right corner of the diptych, amidst other arena scenes, what appears to be a leopard is depicted attacking one of the performers. Although Volbach identifies this animal as a hyena, the small holes covering its body suggest that the artist indeed intended to depict a leopard.<sup>27</sup>

Although leopards were commonly associated with Dionysus in antiquity, this 'divine association' does not seem in general to have awarded them any special status when they appeared in the arena, unlike some lions and elephants who were trained to perform various tricks at the *spectacula*, rather than be slaughtered indiscriminately like other animals.<sup>28</sup> Leopards were apparently harnessed to chariots or carts in the arena on occasion, no doubt in imitation of their role in pulling the chariot of Dionysus, but this was evidently a far from common event. Martial makes a solitary mention of harnessed leopards in the Colosseum, while a single group of three Roman mosaics from Greece depict leopards hitched to racing chariots.<sup>29</sup> The fact that the chariot-drivers' names are included in the mosaics may

indicate that they represent an actual event rather than a figment of the mosaicist's imagination.

Another animal sometimes credited with pulling Dionysus' chariot in antiquity was the lynx. Although different varieties of the lynx native to Europe, Ethiopia, and Asia were known to the Romans, it does not appear to have been a popular animal for the *spectacula* in Rome. The only literary reference to lynxes appearing in such events is Pliny's mention of the Gallic spotted lynx displayed by Pompey in 55 BC.<sup>30</sup> The wording used by Pliny in the relevant passage suggests that, although the first, this was not the only time such animals were seen in Rome, although the complete silence of the other ancient sources on the presence of lynxes in Rome implies that they participated in Roman spectacles on a sporadic basis at best. Jennison remarks that such animals "...would have been too cowardly to show fight in the arena...", which may well have been the reason for their limited appearances at such venues.<sup>31</sup>

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Notes:

<sup>1</sup> Keller (1913) Vol. 1; 86.

<sup>2</sup> Livy 39, 22, 1, 2; Toynbee (1996) 17, 82.

<sup>3</sup> Keller (1913) Vol. 1; 63.

<sup>4</sup> Oppian, *Cynegetica*, 4, 212-29; *Halieutica*, 3, 386-95.

<sup>5</sup> Bertrandy (1987) 216-17; Messineo (2000) 64, fig. 65. Both Bertrandy and Messineo [(2000) 66] suggest that the animal visible within the cage is actually the reflection of the approaching leopard.

<sup>6</sup> Marrou (1978) 275; Settis (1975) 945-46.

<sup>7</sup> Aelian, *De Natura Animalium*, 13, 10; Jennison (1937) 146; Marrou (1978) 275.

<sup>8</sup> Oppian, *Cynegetica*, 4, 320-54.

<sup>9</sup> A.W. Mair, trans., *Oppian, Colluthus, Tryphiodorus* (Loeb Classical Library: 1928) 189; Homer, *Odyssey*, 3, 391.

<sup>10</sup> Jennison (1937) 146.

<sup>11</sup> Pliny, *NH*, 8, 23-24; Livy 44, 18, 8; Toynbee (1996) 82.

<sup>12</sup> Pliny, *NH*, 8, 24.

<sup>13</sup> Toynbee (1996) 82.

<sup>14</sup> Pliny, *NH*, 8, 24; Toynbee (1996) 18, 82.

<sup>15</sup> Cicero, *Ad Familiares*, 2, 11, 2; 8, 6, 5; 8, 10; 9, 3; *Ad Atticum*, 6, 1, 21; Plutarch, *Cicero*, 36, 5; Toynbee (1996) 20.

<sup>16</sup> Cicero, *Ad Familiares*, 8, 9, 3; Jennison (1937) 137-38.

<sup>17</sup> Cicero, *Ad Familiares*, 2, 11, 2.

<sup>18</sup> Cicero, *Ad Familiares*, 8, 9, 3.

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<sup>19</sup> Martial, *Epigrams*, 1, 104.

<sup>20</sup> Herodian I, 15, 5, 6: Toynbee (1996) 22: The large number of Libyan animals included in *venationes* staged by Caligula and Claudius could have theoretically included both leopards and cheetahs; see Dio 59, 7, 3; 60, 7, 3: Toynbee (1996) 21.

<sup>21</sup> Dio 76, 1: Toynbee (1996) 18.

<sup>22</sup> *SHA, Gordiani Tres*, 3, 6, 7; *Elagabalus*, 25, 1; 18, 3: Toynbee (1996) 82.

<sup>23</sup> *SHA, Gordiani Tres*, 33, 1, 2.

<sup>24</sup> Toynbee (1996) 83-84.

<sup>25</sup> Volbach (1976) 43, n. 36.

<sup>26</sup> Marcellinus Comes, *Chronicon*, 14: Loisel (1912) 142.

<sup>27</sup> Volbach (1976) 36-37, n. 21.

<sup>28</sup> For various pieces of Roman art depicting leopards alongside Dionysus see Toynbee (1996) 84-86.

<sup>29</sup> Martial, *Epigrams*, 1, 104: Toynbee (1996) 86.

<sup>30</sup> Toynbee (1996) 86-87: For the lynx's association with Dionysus see Virgil, *Georgics*, 3, 264; Propertius, 3, 17. 8. For Pompey's exhibition of a lynx in Rome, see Pliny, *NH*, 8, 28.

<sup>31</sup> Jennison (1937) 54.

*Cattle:*

The hunting of bulls was evidently a popular pastime throughout the ancient world long before the Roman empire came into being. A gold plate from Ugarit, dating to the fourteenth century BC, depicts three bulls pursued by hunters mounted on horses and a chariot. A similar scene is shown on a relief from Nimrud dating to the reign of the Assyrian king Assurnasirpal (883-59 BC). One of the gold cups found at Vaphio, dating to approximately 1500 BC, depicts bulls being captured in nets, while a Cypriot sarcophagus of approximately 500 BC shows a bull being pursued by hunters armed with spears and shields.<sup>1</sup> A sixth century BC Etruscan oinochoe depicts a group of youths restraining bulls by their horns and feet.<sup>2</sup> Plato mentions bull-hunting as part of his description of Atlantis, while Callimachus' hymn to Artemis describes hunters returning to Olympus with bulls and boars.<sup>3</sup>

Bull-fighting also appears to have been popular at an early date in Spain, while numerous pieces of artistic and literary evidence attest to its popularity throughout the imperial period. A stele from Clunia, for example, depicts an individual armed with a sword and shield in combat with a bull. The circular shield on the Clunia stele indicates that the depicted individual is indigenous, rather than, for example, a Roman immigrant. An Iberian inscription associated with this stele suggests a date prior to the reign of Tiberius (14-37). The painting on an Iberian vase from Liria depicts four individuals, armed with scythes, clubs, spears, and shields, fighting a single large bull.<sup>4</sup>

Part of the evident popularity of bull-fighting in the Roman period may be related to the prominence of bulls in several ancient Greek myths, thereby giving such combat a more 'heroic' air to the Roman audience. Such myths included Hercules' struggle with the Cretan bull, Theseus' fight with the semi-aurine Minotaur, as well as his victory over the bull of Marathon. Numerous representations of these myths in various artistic media attest to their popularity in antiquity.<sup>5</sup>

A number of inscriptions from the Greek East record ταυροβόλια, that appear to have been some sort of competitive spectator event. An inscription from Pinara honours an unknown benefactor for, amongst other acts of generosity, staging κυνήγια και προκυνήγια και ταυροβόλια.<sup>6</sup> A first century BC inscription from Ilion honours a certain Agathes for twice providing ταυροβόλια to the city's populace with forty of his own bulls.<sup>7</sup> As Robert states, no matter how great the generosity of the benefactor, forty bulls seems too high and costly a number for a simple sacrifice. Perhaps the ταυροβόλια sponsored by Agathes, as well as those attested in Pergamon during the Roman period, were similar to the late second century κριοβόλια staged in the latter city, in which the ephebes contended with rams in non-mortal(?) combat.<sup>8</sup>

Another bull event known from spectacles in the Greek east was the ταυροκαθάψια, which evidently was similar to the steer-jumping enjoyed at rodeos today. This type of combat involved mounted *venatores* killing the bulls by jumping off their horses, grabbing the bulls' horns and twisting their necks.<sup>9</sup> According to the ancient sources, the ταυροκαθάψια originated in Thessaly, but later was brought to Rome under Julius Caesar and was later included in the games staged by such emperors as Claudius and Nero as well.<sup>10</sup> As might be expected, given its origin, much of the evidence for this type of event comes from Larissa and other Thessalian cities. A series of fifth century BC coins from these centres illustrate a young man subduing a bull by grabbing its horns, while several inscriptions from Larissa, dating between 100 BC and AD 100, mention victors in various ταυροθήρια, the name given to the event by the Thessalians themselves.<sup>11</sup>

The ταυροκαθάψια later spread throughout the Greek East, evidently through the influence of Roman spectacles including this event. Epigraphical evidence indicates that the ταυροκαθάψια could be staged both as part of a larger *venatio* or on its own.<sup>12</sup> An inscription from Sinope honours a local magistrate for staging a ταυροκαθάψια καὶ κυνηγέσιον και μονομαχίαν, while an inscription from Ancyra dating to the reign of Tiberius records the staging of a ταυρομαχίαν καὶ ταυροκαθάπτας καὶ μονομάχων ζεύγη ὡς in

the city.<sup>13</sup> The latter inscription incidently confirms that the ταυροκαθάψια was a different event from more conventional bull-combats, which could be grouped under the term ταυρομαχία.<sup>14</sup> A second century (?) inscription from Pergamon records the giving of a ταυροκαθάψια over a two day period by the local priestess of Faustina.<sup>15</sup> A relief found in Smyrna, with the inscription ταυροκαθαψίων ημέρα Β' depicts several riders and bulls involved in this event.<sup>16</sup> The continuing popularity of Thessalian bull-fighting in the Greek east is also attested to by a pair of ancient sources which mention its existence. Heliodorus gives a detailed description of this event in his work, while Philippos also attests to the continued existence of the ταυροκαθάψια later in the imperial period.<sup>17</sup> Such bull-fighting, as practiced in Thessaly and elsewhere, may well have originally had religious overtones. Bull-fights are known to have been staged in honour of Poseidon in Ephesus, while these spectacles were also dedicated to Neptune in Ancyra. In Larissa, bull-fights were part of the religious festival in honour of Ζεύς Ἐλευθέριος.<sup>18</sup>

Various types of evidence suggest that bulls were frequent participants in *spectacula* throughout the Roman empire.<sup>19</sup> Spectacles involving bulls are known to have been staged in such widely scattered locales as Olympia, Centumcellae, and Naxos, for example.<sup>20</sup> A second century mosaic from Ostia's Square of the Corporations suggests that the merchants who commissioned it may have been specifically involved in shipping bulls (if not animals in general) for the *spectacula*: the scene depicted is a victorious *venator* standing in front of a bull (Fig. 58).<sup>21</sup> Literary sources attest to the popularity of these animals in the arena from a relatively early date. A passage from Varro suggests that even in his time bull-fights in the *cavea* were quite common. In 79 BC a fight between bulls and elephants was staged by the aediles in Rome, the first encounter between these animals in Rome.<sup>22</sup> Caesar is credited by Pliny with exhibiting the first display of Thessalian bull-fighting in Rome in 45 BC, the previously-mentioned ταυροκαθάψια.<sup>23</sup> According to

Suetonius and Dio, both Claudius and Nero also staged these spectacles during their respective reigns, the former even employing 'authentic' Thessalian horsemen.<sup>24</sup>

Calpurnius Siculus mentions seeing bulls in a *spectacula* likely staged during the reign of Nero (54-68).<sup>25</sup> Seneca records that combat between bulls and bears tied together was a not uncommon sight in the morning spectacles of his day. Seneca suggests that such an encounter was not normally fatal for either animal: a *confector* stood by to dispatch the animals after they had sufficiently 'harassed' each other.<sup>26</sup> If Seneca's statement can be taken as at all representative of normal procedure in such instances, the tying together of the animals was perhaps intended to anger and put into a fighting mood animals who might otherwise be in no mood to fight on a given day. Such a struggle would also provide an entertaining diversion for the audience before the more sanguinary events in the arena. By *confector* Seneca may mean the *venator* who was standing by to fight each animal to the death after these preliminaries.

Other evidence indicates that combats involving bulls were a popular category of *venatio* in the Greek East, as well as in the western empire. For example, an inscription from Ancyra dating to the reign of Tiberius records both a κυνήγιον...ταύρων καὶ θηρίων and a ταυρομαχία given by the priests of the local temple of Augustus and Rome.<sup>27</sup> Another inscription from Xanthos also records a ταυρομάχια given by the local priest Philippos.<sup>28</sup>

Artistic evidence confirms the popularity of such *spectacula*. One of the paintings discovered on the podium of Pompeii's amphitheatre depicts a bull and bear, attached by such a rope, staring each other down. Another painting from the Tomb of Scaurus in Pompeii shows a bull tied to a feline of some sort. Both animals are being goaded into fighting each other by spear-bearing attendants on either side. A somewhat similar scene from one of the Zliten mosaics depicts a garlanded bull in combat with a bear. An attendant in the scene cautiously comes forward to attach the chains hanging from each animal's neck.<sup>29</sup>

An inscription found in Pompeii, mentioning both *tauri* and *taurocentae*, also indicates that bull-fighting was to be seen in that town prior to its destruction.<sup>30</sup> Although scholars such as Toynbee assume that the *taurocentae* were simply specialist bull-fighters, Blazquez maintains that such individuals performed a somewhat different function in the arena.<sup>31</sup> It does seem unusual that the inscription from Pompeii would specifically commemorate the *taurocentae* if they were merely 'run of the mill' bullfighters.

In antiquity as well as in modern-day spectacles, bulls were evidently sometimes too reluctant to perform for their audiences. Apart from the 'rope' method mentioned by Seneca, bulls were provoked into an 'entertaining' fury by a variety of methods. On occasion torches were applied to the animals' hides to arouse them: Blazquez thinks that the *taurocentae* may have fulfilled this function. According to Blazquez, these individuals, only attested in the Pompeian inscription, provoked the bulls by the use of harpoon-like prods and straw dummies, upon which the bulls could initially vent their anger. The fact that the term *taurocenta* appears to be formed from the Greek words ταῦρος and κεντέω (meaning 'goad' or 'prick') supports this contention.<sup>32</sup> The *taurocentae* may have been very much like modern-day picadors, entertaining the crowd with some 'light-hearted' fare, before the more serious events of the *venatio* began.

To judge by the literary evidence, dummies were used to fire up bulls in the late Republic, and were also popular in the time of Martial, who mentions such props in four separate epigrams.<sup>33</sup> Depictions found on consular diptychs indicate that the use of such dummies continued into the late imperial period.<sup>34</sup> Another epigram of Martial describes performers (*taurocentae*?) jumping on the backs of bulls and brandishing weapons in their faces.<sup>35</sup> Pliny describes trained bulls performing such feats as riding in chariots and engaging in mock combat with trained performers, perhaps more *taurocentae* if Blazquez's theory is to be believed.<sup>36</sup> Seneca also records women and boys leaping onto bulls' backs and running alongside them unharmed.<sup>37</sup>



Martial's epigrams suggest that bulls were frequent participants in Titus' *spectaculum* of AD 80, as well as those staged later by Domitian. One concerns the unfortunate *venator* Alcides, tossed into the air by his bovine opponent, while two others concern bulls slain by elephants in the arena. Another bull evidently participated in a grisly mythological reenactment with an unwilling 'Pasiphaë'.<sup>38</sup> Toynbee suggests that the Alcides epigram involved a bull and its rider being lifted into the air by a crane or some other device, but the text does not seem to support such a complicated explanation.<sup>39</sup> Her suggestion that the Pasiphaë episode in the Colosseum merely involved a dummy of a bull also does not ring true: distasteful as the event may seem, Martial seems unlikely to have been impressed enough by this mythological reenactment to write an epigram about it unless it actually involved a live bull.<sup>40</sup> Three more of Martial's epigrams indicate that lions were also involved in fighting bulls (or steers) in the arena.<sup>41</sup>

Later literary references to bulls participating in *venationes* are relatively sparse. The *Scriptores Historiae Augustae* credit Gordian I (238-44), when he was aedile under Septimius Severus in Rome, with including 100 bulls from Cyprus in the large group of animals participating in his *venatio* of that year. A well-known anecdote from the same source records the difficulties an incompetent *venator* had in slaying a bull in the amphitheatre during the reign of Gallienus (253-68).<sup>42</sup> Another questionable source states that Queen Candace of Meroe sent 300 fighting bulls to the same emperor.<sup>43</sup>

Numerous pieces of artistic evidence, however, attest to the popularity of *venationes* involving bulls during the later imperial period. Part of a mosaic located in the Gallery Borghese depicts, amongst other amphitheatre scenes, ten *venatores* fighting seven animals of different species, including a large bull (Fig. 59). Other animals in the scene include a bear, lion, stag, antelope, ostrich, and boar. Two *venatores* clad only in simple tunics, are shown impaling respectively a bull and lion on the point of their spears. This mosaic may be related to the Secular Games staged

by Philip the Arab (244-49) in 247: certain of the animals depicted are also included in coinage minted by Philip to celebrate the event.<sup>44</sup>

Another roughly contemporary mosaic from Bad Kreuznach also depicts various animals, including a bull, in the amphitheatre. These other animals include a panther, lion, bear, stag, boar, horse(?), and goat. One scene in particular is reminiscent of modern-day bullfighting. The victorious *venator*, clad in sandals and decorated leggings, stands with arms outstretched beside his fallen adversary, a bull impaled by his spear. In his right hand he holds what appears to be a coloured cloth or *mappa* of some sort, presumably used to provoke the bull to attack, just like the red cape used by modern matadors.<sup>45</sup>

A similar scene is found depicted in a painting from the Tomb of Scaurus in Pompeii. On the right side of the scene, a bull impaled by a spear looks back towards his slayer, a barefoot *venator* clad in a short plain tunic with his arms spread wide apart like his counterpart on the Bad Kreuznach mosaic. The rest of the painting contains another *venator* in action as well as several different animals including a boar, lion, stag, and two rabbits. Several dogs assist the *venatores* in their task. Although these individuals could also use swords and shields, the previous examples suggest that spears were the favoured weapons for *venatores* fighting bulls.<sup>46</sup>

Bulls are also involved in the large *venatio* depicted on a mosaic from Cos. Sixteen *venatores* and eighteen animals are shown in the scene, including six named bears. Three bulls in the mosaic, like the bears, are also given Greek names: Aeris, Stadiarches, and Arkodamos. Evidently certain bulls, like other species of animals, could also achieve a certain celebrity status in the *venationes*.<sup>47</sup> As described previously (see page 52), a lunette from the Venus mosaic found in Rudston also depicts a running bull with the name Taurus Omicida beside it.

Numerous other pieces of artwork attest to the popularity of bulls in the amphitheatre throughout the imperial period. A mosaic excavated in Reims depicts *venatores* fighting a bull, a bear, two stags, and a boar. A series of mosaics found near

Santa Sabina and the Aventine, dating approximately to the reign of Hadrian (117-138), also depicts scenes of bulls participating in the *venationes*. One mosaic depicts an elephant with rider in combat with a bull, while another shows a horseman in pursuit of a bull.<sup>48</sup> The latter scene may represent Thessalian bull-fighting, rather than a more 'straightforward' *venatio*.<sup>49</sup>

A cippus found in Tunisia depicts a bull batting an unfortunate *venator* into the air, which as Blázquez comments, must have been a fairly common sight at *venationes* in which bulls participated. A scene from one of the Zliten mosaics, dated to the reign of Vespasian (69-79), shows a garlanded bull in combat with a *venator* armed with shield and spear, the same armament which another *venator* fighting a bull in a relief from Asia Minor bears. An engraved stone found in Béziers also depicts a bull being dispatched by a *venator* armed with a spear, while a relief from Naxos shows another *venator* similarly armed fighting a bull.<sup>50</sup> Finally, a scene from one of the sixth-century Areobindus diptychs shows a lion mauling some type of bull in the arena.<sup>51</sup>

Other *venationes* featured bulls fighting solely other animals rather than human opponents. One of the Hadrianic mosaics found near Santa Sabina and the Aventine depicts a bull attacking a bear, a scene similar to that found in a mosaic from Bosseaz. An early third century mosaic from Westerhofen also depicts a garlanded bull in combat with a bear. Another mosaic from Castelporziano depicts a bison in combat with a lion, with *venatores* or arena attendants at either side urging them on. Another lion is attacked by a bull on a Severan mosaic from Trier, as well as in the previously-mentioned mosaic from Bad Kreuznach.<sup>52</sup> The Areobindus diptych, carved in Constantinople in 501, also depicts lions attacking bulls in the arena.<sup>53</sup>

Bulls also appear to have been frequently involved in more large-scale *mêlées* with other animals. A painting found in the cavea of the amphitheatre at Cyrene depicts a large group of animals, some of them already wounded by spears, in combat with one another. The animals shown include a bull, lion, geese, and goat. An early

fourth century mosaic from El Djem depicts a combat involving seventeen animals, fourteen of whom have been paired off against each other. The first register of the mosaic depicts a zebu fighting a bear, a zebu standing alone, and another zebu attacking a boar. The second register shows a lone boar, a zebu attacking a bear, and another zebu chasing another boar. In front of these animals are shown a lone zebu and a boar running behind a bear. The right side of the mosaic depicts these same animals in combat. A lone bull stands in the upper right corner of the mosaic. Both the bull and the zebras wear garlands around their necks and have flower and star-shaped marks on their bodies. Ivy leaves are scattered around the arena floor, in the centre of which is depicted Dionysus with his panther Tyrsus. Beneath them lies a lizard, which Dionysus holds on a lead, and a cantharus sprouting a vine. All of these details, as well as the adornment worn by the bull and zebras, indicate the apotropaic nature of the mosaic, common enough in the depiction of amphitheatre scenes.<sup>54</sup> The previously-mentioned third and fourth century 'animal-catalogue' mosaics found in Radez and Carthage also feature bulls amongst other animals in the arena.<sup>55</sup>

A series of Byzantine mosaics from Kabi-Hiram depict a number of different animals, including zebras, lions, stags, and tigers in pursuit of one another, all within a wooded landscape. According to Blázquez, the pursuits shown in these mosaics, such as a lion pursuing a stag, were all taken from the amphitheatre rather than real life. The trees in the mosaics may reflect the artist's attempt to set such 'artificial' scenes within the natural world or may indeed be related to the natural props like trees which the emperor Probus (276-82) is credited with putting in the Colosseum to make his *venationes* more realistic.<sup>56</sup> Although the particular *venatio* attributed to Probus by the *Scriptores Historiae Augustae* may be fictitious, it seems certain that such props were in fact used by other emperors and magistrates to enhance these spectacles.

A famous scene from the 'Great Hunt' mosaic of Piazza Armerina is the only one from Roman art to depict the capture of bulls in the wild. Four men are shown

trying to drag a large, struggling bull onto the gangplank of one of the waiting animal-transporters in the mosaic. The men pull together on a rope attached to the bull's horns by a red bar fixed onto their tips.<sup>57</sup> The ready availability of bulls from herds throughout most of the empire, however, likely meant that expeditions like those depicted in the 'Great Hunt' mosaic were normally unnecessary, unless a particularly fine specimen was being sought. Animal trainers are known to have acquired oxen from local herds, and then to have sold them to farmers after they were broken in: perhaps these same trainers or ones similar to them bought, trained, and sold bulls for the *venationes* to various *editores*.<sup>58</sup>

Apart from the common bull, the Romans also occasionally made use of related species of a less domesticated variety in their spectacles. Ptolemy II's Alexandrian pageant again provides a precedent: 26 Indian oxen, likely zebus, as well as eight Ethiopian oxen, are said to have taken part in that particular spectacle.<sup>59</sup> The inclusion of zebus in two amphitheatre mosaics from El-Djem suggests that such animals also participated in Roman spectacles, at least in North Africa.<sup>60</sup> A zebu found on a fragmentary *venatio* relief from Laodicea indicates that these animals could also at least periodically appear in the spectacles of Asia Minor.<sup>61</sup>

Pliny implies that both the maned bison and auroch were among the animals frequently imported from Germany by the Romans, a supposition at least partially confirmed by Martial's description of the slaughter of both types of animals in the Colosseum.<sup>62</sup> Martial also records bisons pulling a Gallic chariot (*essedum*) in the arena, perhaps at the same spectacle.<sup>63</sup> The type of chariot used on this occasion may indicate the region from which these bisons were obtained. Seneca mentions hairy bisons in one of his plays, a reference which may have been inspired by seeing one of these animals in a *venatio* staged by Nero.<sup>64</sup> The two types of bulls in the spectacle described by the contemporary(?) poet Calpurnius Siculus, with large shoulder humps and long manes respectively, do not sound like those of the domestic variety: Toynbee suggests they were bisons and zebus.<sup>65</sup> Jennison, while agreeing that the

humped bull was likely a humped zebu from Cyprus, speculates that the maned bull may even have been a gnu, now native to Uganda.<sup>66</sup>

The inscription found recently at the ancient settlement of Montana in modern-day Bulgaria indicates that bisons continued to be popular *venatio* participants in the second century (see page 170). As previously discussed, the inscription concerned the capture of bisons and bears by Roman soldiers in 147 for an imperial *venatio*, likely the one staged the following year by Antoninus Pius to celebrate his *decennalia*. The inscription indicates that bisons could be obtained along the Danube frontier, in addition to the German bisons mentioned by Pliny.<sup>67</sup> The last explicit mention of bisons in Roman spectacles dates to approximately fifty years later: a number of such animals were included in the elaborate 'ship-*venatio*' which Septimius Severus staged in 202 to celebrate his own *decennalia*.<sup>68</sup>

Although Martial is the only author to mention aurochs (*uri*) explicitly, the now extinct European wild ox, as part of a Roman *venatio*, other literary evidence indicates that the Romans were familiar with such animals from at least the late Republican period onwards.<sup>69</sup> Caesar describes the auroch as one of the strange varieties of animals native to the vast Hercynian forest beyond the Rhine, noting that the Germans captured these animals in pits in order to kill them.<sup>70</sup> Pliny also states that these animals were to be found in Germany. The common confusion between aurochs and *bubali* (buffaloes) remarked upon by Pliny may have arisen from both types of animals appearing at the *spectacula* in Rome: one doubts that the *imperitum vulgus* would have known of these creatures, much less confused them, if they had not been exposed to them at one or more *venationes*.<sup>71</sup>

Another bull of indeterminate type which may have appeared in the *venationes* is the Paeonian bull mentioned by Pausanias which was hunted and captured alive in his own day.<sup>72</sup> This animal would appear to be the same as the Paeonian *bonasus* described by Pliny, a bull with a horse-like mane: Both Jennison and Toynbee suggest the animal may have been a musk-ox.<sup>73</sup> If this animal did

become a participant in Roman *spectacula*, it appears not to have done so until somewhere around the end of the first century. Pliny clearly did not see the Paeonian bull in person, while Pausanias, writing in the next century, at the very least was able to talk with hunters experienced in capturing such animals.

The method of capture described by Pausanias has much in common with the pit methods used to capture other animals in antiquity. In the case of the Paeonian bull, the hunters would first of all find a natural hollow and then put up a strong fence around it, presumably leaving a wide enough gap for the bull(s) to enter the hollow. The slope and base of the hollow would then be covered with skins or hides soaked in olive oil, so as to make it too slippery for the bull to exit once it had entered. After four or five days, when the bulls had been sufficiently weakened by hunger, some of the hunters (οἷς τέχνη τιθασεύειν) would enter the hollow and feed the docile animals pine kernels, after which they would lead the animals out of the hollow with ropes.<sup>74</sup> A very similar method is said to have been used in Lithuania as late as the fifteenth century to capture the wild bulls native to that region.<sup>75</sup>

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Notes:

<sup>1</sup> Blázquez (1962) 60.

<sup>2</sup> Blázquez (1962) 63.

<sup>3</sup> Plato, *Crito*, 119d; Blázquez (1962) 60-61.

<sup>4</sup> Blázquez (1962) 63-64.

<sup>5</sup> Blázquez (1962) 57-58.

<sup>6</sup> Robert (1971) 144-45, n. 104.

<sup>7</sup> Robert (1971) 315.

<sup>8</sup> Robert (1971) 315-16.

<sup>9</sup> Blázquez (1962) 57.

<sup>10</sup> Varro, *De Re Rustica*, 3, 53; Pliny, *NH*, 8, 182; Suetonius, *Claudius*, 21, 3; Dio, 60, 19; 61, 9, 1.

<sup>11</sup> CIG 9, 2, 528; 531; 532; 534; Blázquez (1962) 62; Robert (1971) 319, n. 2; Kraay (1976) 115-16.

<sup>12</sup> Robert (1971) 319. See Robert (1971) 318-19 for a more complete listing of ταυροκαθάψια inscriptions from the Greek east.

<sup>13</sup> Robert (1971) 131-32, n. 80; 135-37, n. 86.

<sup>14</sup> Robert (1971) 319, n. 10.

<sup>15</sup> Robert (1971) 218, n. 265.

<sup>16</sup> Blázquez (1962) 62; Robert (1971) 206, n. 234; Inscriptions mentioning Thessalian bull-fighting include CIG 3212, 2759b, 4039, 4157 and CIA 3, 114.

<sup>17</sup> Heliodorus, *Aethiop.*, 10, 30; Philippos, *Anth. Pal.*, 9, 543; Blázquez (1962) 61-62.

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- <sup>18</sup> Artemidorus, *Oneirocr.*, 1, 8: CIG 4039: CIG 9, 2, 529: Blázquez (1962) 62-63.
- <sup>19</sup> For a selection of artwork depicting bulls involved in various spectacles, see Blázquez (1993) 507-40.
- <sup>20</sup> Keller (1913) Vol. 1; 360-61.
- <sup>21</sup> Becatti (1953) 82, n. 128: Blázquez (1993) 492.
- <sup>22</sup> Varro, *De Re Rustica*, 3, 53: Pliny, *NH*, 8, 7.
- <sup>23</sup> Pliny, *NH*, 8, 70.
- <sup>24</sup> Suetonius, *Claudius*, 21, 3: Dio, 60, 19; 61, 9, 1.
- <sup>25</sup> Calpurnius Siculus, *Eclogues*, 7, 60-63.
- <sup>26</sup> Seneca, *De Ira*, 3, 43, 2-3.
- <sup>27</sup> Robert (1971) 135-37, n. 86.
- <sup>28</sup> Robert (1971) 145, n. 105.
- <sup>29</sup> Blázquez (1962) 51-52: Toynbee (1996) 150.
- <sup>30</sup> ILS 5053. The *succursores* mentioned in the same inscription were evidently assistants to the *taurocentae*; Sabbatini Tumolesi likens them to picadors in modern bull-fighting: see Sabbatini Tumolesi (1980) 19.
- <sup>31</sup> Toynbee (1996) 149, 376, n. 21: Blázquez (1962) 49.
- <sup>32</sup> Blázquez (1962) 49: Sabbatini Tumolesi (1980) 18-19.
- <sup>33</sup> Cicero, *Pro C. Com.*, 1: Martial, *De Spectaculis*, 11, 4; 22, 6; *Epigrams*, 2, 43, 6; 10, 86, 4.
- <sup>34</sup> Blázquez (1962) 49-50.
- <sup>35</sup> Martial, *Epigrams*, 5, 31.
- <sup>36</sup> Pliny, *NH*, 8, 70: Toynbee (1996) 150.
- <sup>37</sup> Seneca, *De Ira*, 2, 31, 6.
- <sup>38</sup> Martial, *De Spectaculis*, 6; 18; 19; 22.
- <sup>39</sup> Toynbee (1996) 150.
- <sup>40</sup> Toynbee (1996) 151.
- <sup>41</sup> Martial, *Epigrams*, 1, 48; 60; 104. The latter two epigrams mention lions fighting *iuvenci* rather than *tauri*.
- <sup>42</sup> *SHA*, *Tres Gordiani*, 3; *Gallienus*, 12: Blázquez (1962) 57.
- <sup>43</sup> Keller (1913) Vol. 1; 361.
- <sup>44</sup> Blázquez (1962) 48.
- <sup>45</sup> Blázquez (1962) 48-49: Keller (1913) Vol. 1; 360.
- <sup>46</sup> Blázquez (1962) 49.
- <sup>47</sup> Toynbee (1996) 97, 150.
- <sup>48</sup> Blázquez (1962) 50.
- <sup>49</sup> Toynbee (1996) 149-50.
- <sup>50</sup> Blázquez (1962) 50-51: Keller (1913) Vol. 1; 361.
- <sup>51</sup> Volbach (1976) 33, n. 10.
- <sup>52</sup> Blázquez (1962) 51.
- <sup>53</sup> Toynbee (1996) 150.
- <sup>54</sup> Blázquez (1962) 52-54. In this mosaic, Dionysus holding the lizard on a lead is thought to signify his power over evil (as symbolized by the reptile). The ivy leaves or *hederae* are also common symbols meant to avert evil: see Dunbabin (1978) 77, 184. Zebus are distinguishable from regular bulls by the large humps on their backs: see Toynbee (1996) 149.
- <sup>55</sup> Dunbabin (1978) 71-73.
- <sup>56</sup> *SHA*, *Probus*, 19: Blázquez (1962) 55.
- <sup>57</sup> Toynbee (1996) 150.
- <sup>58</sup> White (1970) 280-82.
- <sup>59</sup> Athenaeus 5, 201C: Toynbee (1996) 149, 376, n. 15.
- <sup>60</sup> Dunbabin (1978) 78-79: Toynbee (1996) 149.
- <sup>61</sup> Robert (1949) 140, n. 326.
- <sup>62</sup> Pliny, *NH*, 8, 15: Martial, *De Spectaculis*, 26: Toynbee (1996) 148-49: There is



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however, some confusion about the *bubalus* mentioned by Martial. Pliny states that this name was often mistakingly applied to the auroch, the meaning that Toynbee assumes Martial intended, although the term *bubalus* could also denote the African antelope or even a buffalo: see OLD, "Bubalus".

<sup>63</sup> Martial, *Epigrams*, 1, 104.

<sup>64</sup> Seneca, *Phaedra*, 64: Toynbee (1996) 148.

<sup>65</sup> Calpurnius Siculus, *Eclogues*, 7, 60-63: Toynbee (1996) 148.

<sup>66</sup> Jennison (1937) 71.

<sup>67</sup> Velkov and Alexandrov (1988) 272-75.

<sup>68</sup> Dio 77, 1, 5.

<sup>69</sup> For the identification of the *bubalus* in Martial's poem as an auroch, see above, n. 62.

<sup>70</sup> Caesar, *Commentarii de B. G.*, 6, 25-28.

<sup>71</sup> Pliny, *NH*, 8, 15. In the *Georgics*, Vergil twice refers to *uri* [2, 374; 3, 532] when he appears to mean *bubali*. It is possible that Vergil saw domesticated buffaloes in rural Italy, but highly unlikely that he ever saw an auroch, except perhaps in Rome: see Thomas (1988) 225.

<sup>72</sup> Pausanias 10, 13, 1-2.

<sup>73</sup> Pliny, *NH*, 8, 16: Jennison (1937) 86, n. 1: Toynbee (1996) 148.

<sup>74</sup> Strabo 15, 1, 42.

<sup>75</sup> Jennison (1937) 143-44.

### Bears:

Although bear-hunting was evidently a popular pastime among Roman emperors, a large number of these animals were also employed in various *spectacula*.<sup>1</sup> The bears procured for the Roman *venationes* and displays were found throughout the Roman world and beyond. Bears were found in Italy, Greece, Asia Minor, and Africa, as well as in the northwestern provinces of the empire. Martial specifically mentions a Scots bear involved in the *venatio* staged to dedicate the Colosseum in 80 AD. Bears were also to be found in Armenia and Persia, where even at a comparatively late date they were still kept, along with other animals, for the king's hunting pursuits.<sup>2</sup>

According to Toynbee, the Romans even imported polar bears occasionally, since she maintains that the bears Calpurnius saw pursuing seals in Rome must have been of this variety.<sup>3</sup> However, Calpurnius does not mention that they were of an unusual colour.<sup>4</sup> It is not implausible that other varieties of bears may have taken an interest in seals, even if they were not familiar with them in their natural habitat. As Fear states, it was common practice for the Romans to pit animals against each other, such as bears and bulls, which did not normally fight in the wild.<sup>5</sup>

The letters of Symmachus show that the long-distance trade in bears was still intact in the late empire. One of his letters mentions bears procured from overseas, while another mentions the traders dealing in these animals (*ursorum negotiantes*).<sup>6</sup> Yet another letter specifically records bears imported from Dalmatia for one of his spectacles.<sup>7</sup>

Many bears also appear to have been procured locally for the various *spectacula* staged throughout the empire, which is not surprising given the species' widespread distribution in antiquity. Demochares' bear *venatio*, as described by Apuleius, included not only bears bought at great expense, likely from far abroad, but also bears captured by Demochares' own men and those given to him by his

friends.<sup>8</sup> The latter two groups of animals would seem to have been obtained locally. For one of his spectacles Symmachus ordered some Italian bears, which he feared might be replaced by inferior local bears on the way to their destination.<sup>9</sup>

A major misconception of Pliny, apparently shared by many Romans, was that bears were not native to Africa. Referring to the bears involved in Ahenobarbus' *venatio* in 61 BC, Pliny states "I am surprised at the description of the bears as Numidian, since it is known that the bear does not occur in Africa".<sup>10</sup> Various pieces of literary evidence suggest, contra Pliny, that the Romans imported bears from Africa in both the Republican and imperial periods, at least until the first century AD. Mention has already been made of the Republican *spectacula* of Ahenobarbus and Servilius, as well as the games of Caligula in 37: in all of these events either Numidian and Libyan bears are said to have participated. At a date closer to the completion of Pliny's work, both Martial and Juvenal record the presence of Libyan and Numidian bears in Rome.<sup>11</sup> Given the literary evidence earlier than Pliny, which establishes the existence of African bears, it is all the more surprising that he should so strongly deny their existence. Jennison suggests that one possible cause of Pliny's error may be that in his day the bears used in Roman *spectacula* were only imported from Europe, or even Italy itself, although it seems hard to believe that the well-read Pliny would not have nonetheless realized from earlier literary references mentioned above that bears indeed were to be found in Africa.<sup>12</sup>

The late second century writer Oppian describes a method used to capture bears in Armenia, which at that time may have been a popular source for the bears used in Roman *spectacula*. This method involved digging a trench leading from the bear's lair to an open net, flanked by hunters on one side and a string of ribbons and feathers, meant to frighten the animal, on the other. After being roused from its slumber by trumpets, the bear was driven down the trench and into the waiting net, which was closed by hidden men on either side holding the drawstrings. At this point additional nets were heaped on the bear to prevent it escaping from the original net,

a problem which Oppian states was all too common. After having its right paw fettered by the hunters, the bear was bound to wooden poles(?), presumably for the purpose of carrying it, and then put in a wooden cage.<sup>13</sup> Seneca, in describing the use of feathers on a rope in hunting, implies that a similar method to that related by Oppian may also have been used to capture many other types of animals besides bears. Lucan and Virgil indeed confirm that the same device was used to capture deer.<sup>14</sup>

Bears were included in public spectacles as early as Ptolemy II's elaborate pageant in Alexandria.<sup>15</sup> The first recorded display of bears in Rome took place in 169 BC, when forty were included in the selection of animals exhibited in the Circus Maximus by the curule aediles. The next recorded Roman *spectaculum* involving bears was that put on by the curule aedile Domitius Ahenobarbus in 61 BC, in which 100 Numidian bears fought against 100 Ethiopian *venatores*.<sup>16</sup> In 25 BC the praetor Publius Servilius staged a large *venatio* in which 300 bears, as well as numerous other animals, perished.<sup>17</sup>

Bears appear to have become extremely popular in *venationes* staged under subsequent Julio-Claudian emperors. Horace, in an epistle addressed to Augustus, suggests that bear shows, along with boxing matches, were one of the most popular diversions of the Roman mob in his day.<sup>18</sup> 400 bears, along with an equal number of Libyan animals, were killed in a *venatio* of AD 37, while another beast-hunt in 41, featuring the same combination of animals, included the slaughter of 300 bears. One of Nero's *venationes* in 55 saw the death of 400 bears as well as 300 lions.<sup>19</sup> A generalizing remark made by Seneca in his philosophical treatise *De Ira*, concerning trainers entering bear cages with impunity, may imply that these animals and their cages were a relatively common sight in his day.<sup>20</sup>

Bears, as mentioned above, were also involved in the massive *spectaculum* put on by Titus to dedicate the Colosseum. Martial mentions these animals seven times in his work devoted to Titus' games, including the northern bear (...*primus in Arctoi qui*

*fuit arce poli...*) slain by the famed *venator* Carpophorus.<sup>21</sup> Bulls appear to have been the most popular opponent for bears, although the combat between a bear and a rhinoceros mentioned by Martial evidently enjoyed a certain degree of popularity: a Roman lamp also depicts these two animals fighting.<sup>22</sup> Bears were also in all likelihood involved in the *venatio* staged by Trajan to celebrate his victory in Dacia, in which a total of 11,000 animals are said by Dio to have perished.<sup>23</sup>

According to the contemporary historian Dio, Commodus included 100 bears in the large assortment of animals he killed personally in the Colosseum, while the same number of bears was also involved in the elaborate 'ship' *venatio* that Septimius Severus put on in the Colosseum for his tenth anniversary.<sup>24</sup> As aedile under Severus, the eldest Gordian (the future Gordian I) is credited by the SHA with exhibiting 1000 bears on a single occasion, although this figure appears suspicious, especially given that Severus could only muster 100 bears for his own anniversary *venatio*.<sup>25</sup>

The last specific imperial *venatio* recorded in the ancient sources, that of Probus in 281, featured 300 bears in addition to numerous other animals.<sup>26</sup> We know, however, from the writings of St. Augustine that *venationes* involving bears retained their popularity a century later. In one of his works Augustine complains that "...the wordly man...seeks empty honours from men, and to obtain them, he offers indecent games...and public bear hunts."<sup>27</sup> Confirmation of Augustine's statement comes from other roughly contemporary sources. Ammianus Marcellinus records that the emperor Valentinian I (364-75) kept as pets two vicious bears, *Mica Aurea* and *Innocentia*, who appear to have been active in killing criminals in the arena.<sup>28</sup> His successor, Valentinian II (375-92), is said to have enjoyed nothing more than lion or bear-hunts.<sup>29</sup> Several of Symmachus' letters, written in the same period, concern bears involved in the spectacles staged by himself or his son.<sup>30</sup>

Bear *venationes* continued to be staged throughout the fifth and sixth centuries in the eastern empire, as shown by the series of ivory diptychs

commemorating them. An eastern diptych dating to around 400 depicts a combat between *venatores* and bears, while two diptychs made for the consul Areobindus in 506 show similar scenes of bears in combat with various individuals. Yet another diptych, commissioned by Anastasius in 517, depicts much the same scene.<sup>31</sup> A sixth century ivory pyxis also shows two *venatores* attacking a bear.<sup>32</sup>

Bears, like elephants and lions, were also sometimes involved in *spectacula* not involving their own destruction. Martial records three instances of bears being used to kill criminals dressed up as Laureolus, Daedalus, and Orpheus in the Colosseum, as part of the spectacles of AD 80.<sup>33</sup> Apuleius describes a she-bear seated in a sedan-chair and dressed as a Roman matron at a procession dedicated to Isis.<sup>34</sup> At a later date, some bears acting as mimes are said to have been included in the spectacles given by Carus and his kin in Rome.<sup>35</sup>

Numerous representations of bears in the arena survive from the imperial period, another indicator of their popularity with Roman audiences. Several of these depictions appear to confirm the occasional involvement of tame bears in non-violent displays. Fragments of a mosaic from Curubis in North Africa depict seven playing bears, three of whom are named Plotina(?), Leander, and Invictus. Another North African mosaic from Radez shows eight bears playing in a non-violent manner with an ostrich, stag, bull, and five boars. Six of the bears are named Nilus, Fedra, Alecsandria, Simplicius, Gloriosus, and Braciatus.<sup>36</sup>

It should be noted, however, that some of the bears' names, like Invictus and Braciatus, seem more appropriate for fighting rather than trick-performing bears. These two mosaics, therefore, may represent the scene just after the animals were released into the arena, before any combat took place. The people who commissioned these mosaics, unlike many of their contemporaries, may have wished to see the animals commemorated in their full vigour, rather than in the dead or dying state seen in many North African mosaics.

A now-vanished gem also appears to show the preliminaries to a spectacle involving bears. It depicts a bear leaning against its trainer Markellos, who holds a whip in one hand and an unidentifiable object in the other.<sup>37</sup> The fact that the trainer's name appears on the gemstone may suggest that these individuals could achieve a certain level of celebrity. A sculpted bronze Roman *ampulla* depicts another performing bear: in this case the bear wears a harness.<sup>38</sup>

Many other depictions, apart from the ivory diptychs mentioned earlier, show bears in the context of arena *venationes*. For example, a mosaic fragment from Tunisia depicts the *venator* Lampadius along with two bears placed in the registers above him. Another mosaic from Carthage shows the *venator* Bonifatius along with the bears Omicida and Crudelis. Seven bears are also included in the large *venatio* mosaic found in Cos. Six of the bears are named in Greek: two are called Norike, while the rest are called Drakontis, Xanthias, Dionysos, and Tachine. A limestone relief on display in Sofia shows a chaotic *venatio* involving seven bears, three bulls, a crocodile and a stag, apart from the five men also included in the scene.<sup>39</sup>

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Notes:

<sup>1</sup> Keller (1913) Vol. 1; 178.

<sup>2</sup> Toynbee (1996) 93-94: For Italian bears see e.g. Martial, *De Spectaculis*, 8: For bears in Greece and Asia Minor see e.g. Pausanias, 1, 32, 1; SHA, *Hadrian*, 20, 13: For African and Armenian bears see e.g. Juvenal, 4, 99-100; Oppian, *Cynegetica*, 4, 354-55: For the *Caledonicus ursus* see Martial, *De Spectaculis*, 9, 3. If Martial's information about the origin of this bear is correct, it may well have been sent to Rome by Agricola, who was campaigning in northern England and Scotland at the time of the Colosseum's dedication. For the Persian *vivarium* encountered by the Roman army during its campaign of 363 see Ammianus Marcellinus, 24, 5, 2.

<sup>3</sup> Calpurnius Siculus, *Eclogues*, 7, 65-66: Toynbee (1996) 94.

<sup>4</sup> Fear (1993) 45.

<sup>5</sup> Fear (1993) 45.

<sup>6</sup> Symmachus, *Epistulae*, 9, 135; 5, 62.

<sup>7</sup> Symmachus, *Epistulae*, 9, 142: Toynbee (1996) 98.

<sup>8</sup> Apuleius, *Metamorphoses*, 4, 13.

<sup>9</sup> Symmachus, *Epistulae*, 7, 121.

<sup>10</sup> Pliny, NH, 8, 54: Toynbee (1996) 94.

<sup>11</sup> Livy 44, 18, 8: Dio 53, 27, 6; 59, 7, 3: Martial, *Epigrams*, 1, 104: Juvenal 4, 99-100: Toynbee (1996) 94: Jennison (1937) 50.

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- <sup>12</sup> Jennison (1937) 50.  
<sup>13</sup> Oppian, *Cynegetica*, 4, 354-424.  
<sup>14</sup> Virgil, *Aeneid*, 12, 749; *Georgics*, 3, 371; Lucan 4, 437; Seneca, *De Ira*, 2, 11, 5-6; 2, 12, 2; Jennison (1937) 145.  
<sup>15</sup> Athenaeus, 5, 201C.  
<sup>16</sup> Pliny, *NH*, 8, 54.  
<sup>17</sup> Livy. 44, 18, 8; Dio, 53, 27, 6; Toynbee (1996) 17-18.  
<sup>18</sup> Horace, *Epistulae*, 2, 1, 185-86.  
<sup>19</sup> Dio, 59, 7, 3; 60, 7, 3; 61, 9, 1; Toynbee (1996) 18, 21.  
<sup>20</sup> Seneca, *De Ira*, 2, 31, 6.  
<sup>21</sup> Martial, *De Spectaculis*, 9; 10; 13; 17; 24; 25; 26; Toynbee (1996) 93-94: As Toynbee states, the unfortunate bear slain by Carpophorus, if not a polar bear, may have been from Germany or Britain [the *Caledonius ursus* of *De Spectaculis*, 9?].  
<sup>22</sup> Keller (1913) Vol. 1; 179.  
<sup>23</sup> Dio 68, 15.  
<sup>24</sup> Dio 72, 18, 1; 76, 1.  
<sup>25</sup> *SHA*, *Gordiani Tres*, 3, 6.  
<sup>26</sup> *SHA*, *Probus*, 19.  
<sup>27</sup> Augustine, *Serm.*, 32, 20; Lepelley (1992) 60.  
<sup>28</sup> Ammianus Marcellinus, 29, 3, 9; Toynbee (1996) 97.  
<sup>29</sup> Keller (1913) Vol. 1; 179.  
<sup>30</sup> Symmachus, *Epistulae*, 2, 76; 5, 62; 9, 132, 135, 142; Toynbee (1996) 98.  
<sup>31</sup> Toynbee (1996) 96-98; Volbach (1976) 32-33, n. 8; 53, n. 58.  
<sup>32</sup> Volbach (1976) 74, n. 103.  
<sup>33</sup> Martial, *De Spectaculis*, 9; 10; 24; 25.  
<sup>34</sup> Apuleius, *Metamorphoses*, 11, 8.  
<sup>35</sup> *SHA*, *Carus*, 19, 2.  
<sup>36</sup> Toynbee (1996) 95-96; Dunbabin (1978) 72-74.  
<sup>37</sup> Toynbee (1996) 96.  
<sup>38</sup> Toynbee (1996) 96.  
<sup>39</sup> Toynbee (1996) 97-98.



*Boars and Pigs:*

As in the case of bears, wild boars and swine could be obtained by the Romans from throughout their various territories. Pliny states that wild boars could not be found in Africa, but as in the case of his similar assertion concerning bears, this statement appears to be an error.<sup>1</sup> Perhaps Pliny's error in the case of both animals was caused by the fact that, due to the relative ubiquitousness of such creatures, the Romans, at least in Pliny's lifetime, never imported them from Africa.

In the Republican period, several Roman nobles kept such animals in *vivaria* both as a ready supply of meat and as a means of entertainment, like the boars used in the Orpheus spectacle staged by Quintus Hortensius on his estate.<sup>2</sup> Boars could also be kept in such enclosures for hunts staged by their owners. Numerous pieces of artistic and literary evidence, such as mosaics and sarcophagi, suggest that boar-hunting was a popular activity amongst Romans of both the Republican and imperial periods.<sup>3</sup>

The first specifically recorded 'transfer' of such hunts to the arena in Rome only appears to have occurred in the reign of Nero, when Calpurnius Siculus records seeing in the city what Toynbee and Jennison suggest were African wart-hogs.<sup>4</sup> However, Keller surmises that the horned boars seen by Calpurnius may have been the Indian tusked wild boars described by Pliny.<sup>5</sup> Boars were also included in Titus' spectacle of AD 80: Martial records the boar(s) slain by the *venator* Carpophorus in the Colosseum, as well as the pregnant sow killed on another occasion during the games. The fatal wound allowed one of its live piglets to escape its womb.<sup>6</sup> Although this impromptu Caesarian section sounds like a grisly accident, it is not impossible that this spectacle was intended when the pregnant sow was brought into the Colosseum.<sup>7</sup>

Although boars were likely included in large *venationes* put on by subsequent emperors like Trajan, the next specific mention of these animals in a spectacle dates

to the reign of Septimius Severus. In 202, as part of the games celebrating Severus' *decennalia* and Caracalla's marriage, sixty boars, apparently from Plautian's private stock, fought against each other in public.<sup>8</sup> During the same reign, the future Gordian I is said to have included 150 boars in the massive *venatio* he put on as aedile.<sup>9</sup> The boars that participated in the latter two *venationes*, as well as later *spectacula*, may have been bred at an imperial enclosure. Plautian, in his capacity as praetorian prefect, may have exercised control over at least some of these animals through the praetorian *custodes vivarium* attested to in a previously-mentioned inscription.

Caracalla himself is said to have slain 100 boars in a single day by his own hand, although it is not absolutely certain whether this was feat was part of a public performance or not.<sup>10</sup> Some fifty years later, 1000 boars are alleged to have participated in the extravagant *spectaculum* staged in the Circus Maximus by Probus in 281.<sup>11</sup> The massive number of boars and other animals attributed to this spectacle seems inordinately high, although the involvement of a larger number of animals than usual may explain why the *venatio* was put on in the Circus rather than the smaller Colosseum. The last recorded display of boars in Rome was much more modest in scale: in the late fourth century, Stilicho had a gigantic German boar brought to the capital.<sup>12</sup>

Other evidence shows that *venationes* involving boars were also popular in the provinces outside of Italy. An arena mosaic fragment from Radez, Tunisia, depicts five boars along with other creatures, an ostrich, a bull, a stag, and eight bears.<sup>13</sup> On another similar mosaic from the island of Cos, sixteen *venatores* are portrayed in combat with a variety of animals. Like many of the other animals, the three boars in the scene, Gorgonis, Polyneices, and Solon, are named.<sup>14</sup>

A few mosaic scenes depict the capture of boars, perhaps for the games. An early third century boar-hunt mosaic from Carthage shows one of the animals being driven by a hunter and his two dogs into a net stretched out into a semi-circle. One of

the scenes on the 'Little Hunt' mosaic from Piazza Armerina depicts a live boar being carried home from the hunt in a net that hangs from a pole supported on the shoulders of two men.<sup>15</sup>

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Notes:

<sup>1</sup> Pliny, *NH*, 8, 83: Jennison (1937) 49-50.

<sup>2</sup> Varro, *De Re Rustica*, 3, 12-13: Toynbee (1996) 16, 131-32.

<sup>3</sup> Toynbee (1996) 132-33.

<sup>4</sup> Calpurnius Siculus, *Eclogues*, 7, 58: Jennison (1937) 71.

<sup>5</sup> Pliny, *NH*, 8, 78: Keller (1913) Vol. 1; 405.

<sup>6</sup> Martial, *De Spectaculis*, 14-17. Although it is possible that this episode was merely an invention of Martial, it is not necessarily fictional. If the sow's womb was sliced open close enough to the end of her pregnancy, some of her fetuses could survive for a short period of time thereafter: Private communication, Dr. M. Bregliano, Westgate Animal Clinic, Lethbridge, Alberta, Canada.

<sup>7</sup> Petronius [*Satyricon*, 40] describes an event perhaps intended as a parody of contemporary arena performances, albeit on a smaller scale: when the roast pig's belly is sliced open at Trimalchio's dinner-party, birds fly out of the opening, much to the delight of the guests present.

<sup>8</sup> Dio, 77, 1, 3.

<sup>9</sup> *SHA*, *Gordiani Tres*, 3, 6, 7.

<sup>10</sup> Dio 88, 10.

<sup>11</sup> *SHA*, *Probus*, 19.

<sup>12</sup> Claudian, *De Consulatu Stilichonis*, 3, 304-06: Toynbee (1996) 134.

<sup>13</sup> Toynbee (1996) 96.

<sup>14</sup> Toynbee (1996) 97, 134.

<sup>15</sup> Toynbee (1996) 133: Dunbabin (1978) 48-49.

*Deer and Antelopes:*

Like boars, deer in Italy appear to have been popular as prey among Roman hunters long before the appearance of the *venationes* in Rome. Keeping deer as pets was also evidently familiar to many Romans, judging by frequent depictions of Cyparissus and his famous companion found in Pompeii, as well as Virgil's tale of the Latin maiden Silvia and her pet stag.<sup>1</sup> Tame stags were amongst the animals kept in the *vivarium* of the Republican orator Hortensius.<sup>2</sup> In the first century AD Pliny lists no fewer than seven varieties of deer or antelope imported by the Romans, of which the last four most likely came from Africa or Egypt: *caprae* (roebucks), *rupicapra* (chamois), *ibices*, *dammae*, *oryges*, *pygargi* (impala antelopes), and *strepsicerotes* (lesser kudus).<sup>3</sup> Columella, writing at approximately the same date, implies that oryx antelopes, roebucks, gazelles(?), and various other types of deer, were not at all uncommon in the *vivaria* of Italian landowners.<sup>4</sup>

Deer, like boars and bears, were a frequent feature of *venationes* and animal displays in Rome, no doubt because of their ready availability as compared to most other animals. As Toynbee states, a coin-type of Augustus depicting a lion eating a stag may reflect the latter animal's participation in at least one of this emperor's *venationes*.<sup>5</sup> The first recorded participation of such animals in the *venationes* of Rome occurred in AD 80: Martial describes the *damma* chased by Molossian hounds at Titus' spectacle in the Colosseum. Two other epigrams of Martial record deer fighting and killing each other in public, possibly on the same occasion. The mention in one of these epigrams of a *venator* and his dogs standing by in amazement, if not merely a poetic flourish of Martial, may indicate that the battle between the deers was a completely unplanned event.<sup>6</sup>

The same poet also mentions stags, as well as other animals, in harness at yet another imperial *spectaculum*.<sup>7</sup> At a later date Pausanias records seeing white deer of unspecified origin in Rome.<sup>8</sup> According to Jennison, these animals may have been

albino specimens of the red or fallow deer, which would have been relatively common in northern Europe.<sup>9</sup> Several exhibitions of deer by later emperors are also recorded by the *Scriptores Historiae Augustae*. Elagabalus on occasion is said to have ridden in public on a chariot pulled by four stags, while, in addition to numerous other animals, Gordian I is credited with collecting 200 deer, 200 stags with palm-shaped antlers, as well as an indeterminate number of British stags for the *venatio* he supposedly staged as aedile under Septimius Severus.<sup>10</sup> Aurelian is said to have used a chariot team similar to that of Elagabalus for the triumphal procession he staged in Rome after his defeat of Zenobia. Aurelian's stags, however, were not native to Italy, but were said to have once belonged to the king of the Goths north of the Danube. The next emperor, Probus, included 1000 stags and a number of deer in the huge *venatio* that he staged in the Circus Maximus as part of his own German triumph.<sup>11</sup>

Not surprisingly, deer also appear to have been a staple of the less ambitious *spectacula* staged outside of Rome. One of the participants in the *venatio* mosaic from Cos is a stag named Ἐρως. A mosaic found in Trier, depicting a cart drawn by two stags, may have also been based on an actual spectacle staged in that city.<sup>12</sup> In addition, the herbivorous animals recorded as participants in various *venationes* by numerous Roman inscriptions undoubtedly included at least some deer.<sup>13</sup>

On occasion, the Romans also imported a close relative of the common deer, the elk, for their *spectacula*. Such animals, judging from the ancient testimony, appear to have been obtained from the less-urbanized northwestern provinces of the empire as well as adjacent non-Roman territory, such as that located in modern-day Germany. Pliny rather vaguely refers to elks as northern creatures, while Pausanias describes them as being native to Celtic lands.<sup>14</sup> Pliny's curious comparison of the elk to a bullock suggests that he himself had never seen the animal in person, perhaps signifying that the Romans had not yet begun in his lifetime to import these animals for the *spectacula*.<sup>15</sup>

The elk's relative scarcity in the wild, as well as the apparent difficulty Roman hunters had in capturing it, may well explain its relative infrequency in the *spectacula*. Because of the difficulty in tracking such animals, one could only hope to capture them by surrounding a given area of forest with hunters, who then walked towards each other, trapping the animal(s) in the steadily shrinking space between them.<sup>16</sup> In addition, Calpurnius Siculus, likely writing during the reign of Nero, comments that the elks he saw at a certain spectacle were rare even in their native forests: *vidi...raram silvis etiam, quibus editur, alcen*.<sup>17</sup>

The first securely-dated mention of elks in Rome dates to the reign of Septimius Severus: the future Gordian I is said to have included ten of these animals in the *venatio* he staged as aedile in the capital. According to the same source, the large animal collection amassed several years later by Gordian III included an identical number of elks.<sup>18</sup> Further specimens of this animal are also said to have participated in the triumphal procession staged by Aurelian in Rome.<sup>19</sup> A diptych carved in the western empire may indicate that elks participated in *venationes* at least as late as the fifth century. The diptych in question depicts a single *venator* successfully engaging five animals which Toynbee takes to be elks in the arena. Keller, however, maintains that they are merely poorly-carved stags, while Volbach suggests that they may be Mesopotamian fallow deer (Fig. 60).<sup>20</sup>

A similar animal occasionally encountered in Roman *spectacula* was the antelope, as well as its close relative the ibex. Although some of the former animals which appeared in Ptolemy II's famous procession were imported from beyond the Black Sea, those used by the Romans appear to have been predominantly African varieties<sup>21</sup> Pliny states that *oryges*, *dammae*, *pygargi*, and *strepsicerotes* were imported to Italy in his day from overseas, later indicating the African origin of both the *oryx* and the *strepsicerotis*.<sup>22</sup> According to Toynbee, the varieties of antelope represented respectively on this list of Pliny may be Sabre antelopes, gazelles, white-rumped and twisted-horned antelopes.<sup>23</sup> According to Aelian, the gazelle was also

native to Libya, Ethiopia, and Egypt, although it could also be found in Armenia.<sup>24</sup> Juvenal states that the meat of the *Gaetulus oryx* was a favourite amongst Roman epicures.<sup>25</sup> Closer to home, the Romans could obtain ibexes from the Alps for occasional *spectacula*.<sup>26</sup>

Unfortunately, in the case of antelopes, it is not always certain which particular variety a given ancient author is referring to. As Keller states, in the event of such a source's mentioning an *oryx*, one cannot be absolutely certain whether the Sabre antelope (*oryx leucoryx*) or the roebuck (*oryx beisa*) is meant, since the behavioural habits of the two animals are virtually identical. One should perhaps be inclined towards the former, since, besides being more numerous than the roebuck, this is evidently the only variety depicted in both Egyptian and Roman art.<sup>27</sup>

According to Columella, Sabre antelopes were one of the more popular animal varieties kept in the *vivaria* of wealthy Romans in the Republican period.<sup>28</sup> Oppian, writing at a later date, recommends pet gazelles as ideal surrogate mothers for hunting dogs, although this poetic recommendation may or may not reflect contemporary Roman practice.<sup>29</sup> Although antelopes may well have featured in the *spectacula* of earlier Julio-Claudian emperors, the earliest specific reference to such animals appearing in the Roman shows is that made by Martial, writing under Domitian. The poet describes the *oryx* as one of the *matutinae ferae* of the arena.<sup>30</sup>

Although, as stated above, Toynbee considers this animal to have been a Sabre antelope, Keller instead suggests that it was a roebuck. The evident ferocity of the *oryx*, as described by Martial, is reminiscent of modern accounts of cornered roebucks viciously attacking hunters and their dogs, as well as Oppian's description of the roebuck's prowess in fighting such opponents as bears, boars, and lions.<sup>31</sup> If Keller's identification of Martial's *oryx* is correct, this ferocity may explain why such animals were rare participants in the Roman *venationes*, if in fact they ever did

participate. The only known depiction of an *oryx*'s being captured in the wild shows a Sabre antelope, evidently a more docile creature than its close relative.<sup>32</sup>

Martial also records the appearance of gazelles (*dorcadés*) at the *spectacula*: such creatures, due to their evident popularity, were often spared in the *venationes* at the request of the audience.<sup>33</sup> The fact that Martial implies this act of mercy was a relatively common occurrence may suggest that such animals were familiar to Roman spectators long before the reign of Domitian. This inference is also supported by the depiction of such animals pulling carts driven by Cupids in a wall-painting from the House of the Vettii in Pompeii.<sup>34</sup> The use of gazelles in *venationes* may well have continued for centuries thereafter: these animals, in Egypt at least, were still available for capture as late as the fourth century AD (see page 175).

Another type of antelope which may have participated in a *venatio* seen by Martial was the Tora hartebeest from Africa, known to the Romans as the *bubalus*.<sup>35</sup> As in the case of other arena animals, the Romans may have been at least partially inspired to include these animals in their *spectacula* by their appearance in Ptolemy II's famous procession, where fifteen teams of boubaloi are said to have participated.<sup>36</sup> Martial records the death of a *bubalus*, along with a bison, at the hands of the *venator* Carpophorus, although Toynbee takes this particular animal to be an auroch rather than a hartebeest, since Pliny explicitly states that the term *bubalus* was often mistakenly applied to the former creature.<sup>37</sup> Although Toynbee may be correct, there appears to be no reason why an African hartebeest could not be put in the arena at the same time as a European bison.

Although no *spectacula* involving antelopes or ibexes are directly attested for at least a century after those described by Martial, the literary evidence suggests that these animals may have enjoyed something of a renewal in popularity during the third and fourth centuries. The spectacle staged by the eldest Gordian while aedile under Septimius Severus is said to have included 200 ibexes, while the massive *venatio* put on in the Circus Maximus by Probus some eighty years later apparently



also included a number of such animals.<sup>38</sup> When arranging his praetorian games in Rome, Symmachus specifically requested from a friend both *pygargi* and *addaces* (Topi and impala antelopes) for the spectacle.<sup>39</sup>

The participation of various types of antelope in additional *spectacula*, however, is indicated by several pieces of Roman art depicting them in combat with either animal or human foes, at least some of which were evidently inspired by clashes witnessed in the arena. Several second and third century sarcophagi include sculptures of lions attacking or killing Sabre antelopes at either end, such as that from the Museo Torlonia depicting a lion and its attendant standing over a dead antelope.<sup>40</sup> The 'Great Hunt' mosaic from Piazza Armerina includes a scene of one antelope being slain by a lion along with two leopards, and another being stalked by a leopard, while a mosaic from the imperial palace in Constantinople depicts ibexes as well as a gazelle being attacked by another pair of leopards.<sup>41</sup> The Romans were evidently not the only people to hunt such animals for sport: a fifth-century silver plate depicts Peroz I of Persia hunting four ibexes on horseback, presumably within his own royal *vivarium*.<sup>42</sup>

The population of at least two types of antelopes common in the *spectacula* of the early empire appears to have seriously declined by its later stages. As stated previously, Pliny indicates that the import of *pygargi* and *addaces* (Topi and impala antelopes) from Africa to Italy, at least some of whom were likely employed in Roman spectacles, was common in his own day.<sup>43</sup> However, Symmachus, as we have seen, requested a friend to supply him with these same animals, in order that the praetorian games of 400 might be distinguished by a new novelty (*...ut novo cultu Romana splendescat editio...*).<sup>44</sup> Assuming that these animals had indeed participated in *spectacula* of the first century, it is unclear when they ceased to do so, although Symmachus' wording suggests that it was well before his own lifetime.<sup>45</sup> By Symmachus' day, none of these antelopes may have been left in Roman territory: in

the letter just cited, Symmachus advises his associate that *copiam* [of the antelopes] *limes vobis finitimus subministrat*.

Several depictions of the capture of deer and antelope for the *venationes* or displays also survive from the Roman world. A scene from the 'Little Hunt' mosaic of Piazza Armerina shows three stags being driven by huntsmen into a net fastened at both ends to tree stumps, while five panels from the Hinton St. Mary mosaic depict dogs in pursuit of deer. However, as Toynbee states, all of these scenes appear to concern the capture rather than the destruction of the quarry, in particular that from the 'Little Hunt' mosaic, where no hunting dogs at all are involved in the chase.<sup>46</sup> A mosaic from the Maison de la Chasse in Utica shows two hunters driving an equal number of gazelles into a waiting net.<sup>47</sup> Another mosaic from Utica depicts the capture of a Berber stag, this time by means of a hunter using a lasso.<sup>48</sup> Amongst the groups of captured animals in the previously-mentioned hunt-mosaic from Hippo Regius, Algeria, is one of hartebeests, an animal no longer found in northwest Africa. The same mosaic also depicts hunters in pursuit of beisa antelopes.<sup>49</sup>

More than one scene of antelope capture is included in the 'Great Hunt' mosaic from Piazza Armerina. On the left-hand side of the mosaic a dog is shown chasing two animals which, judging from their appearance, could either be Tora hartebeests or gazelles. Another antelope of indeterminate type is being forcibly carried into a waiting ship by two of the hunt attendants while another attendant with a rope leads a Sabre antelope towards yet another vessel.<sup>50</sup> Two North African mosaics, found in Cirta and Hippo Regius, depict other Sabre antelopes, along with other animals, being driven into waiting nets by huntsmen and dogs.<sup>51</sup>

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Notes:

<sup>1</sup> Virgil, *Aeneid*, 7, 483-502: Toynbee (1996) 143-44.

<sup>2</sup> Varro, *De Re Rustica*, 3, 13, 3.

<sup>3</sup> Pliny, *NH*, 8, 79: Jennison (1937) 131.

<sup>4</sup> Columella, *De Re Rustica*, 9, 1: Jennison (1937) 131.

<sup>5</sup> Toynbee (1996) 374, n. 16.

- <sup>6</sup> Martial, *De Spectaculis*, 33: *Epigrams*, 4, 35; 74.
- <sup>7</sup> Martial, *Epigrams*, 1, 104.
- <sup>8</sup> Pausanias, 8, 17, 4.
- <sup>9</sup> Jennison (1937) 131-32.
- <sup>10</sup> *SHA*, *Elagabalus*, 28, 2; *Gordiani Tres*, 3, 7.
- <sup>11</sup> *SHA*, *Aurelian*, 22, 3; 33, 3; *Probus*, 19, 4.
- <sup>12</sup> Toynbee (1996) 144.
- <sup>13</sup> See e.g. ILS 5063a (a 2nd century *venatio* in Beneventum which included *ceteri herbarii*), ILS 399 (a *venatio* in Veneria Rusicade which included *mansuetae* and *herbaticae*), and ILS 5055 (a late second century *venatio* in Panormus which included *omne genus herbariarum*).
- <sup>14</sup> Pliny, *NH*, 8, 16; Pausanias 5, 12, 1. Calpurnius Siculus (*Eclogues*, 7, 59) merely refers to the elk as a forest animal.
- <sup>15</sup> Toynbee (1996) 145.
- <sup>16</sup> Keller (1913) Vol. 1; 283.
- <sup>17</sup> Calpurnius Siculus, *Eclogues*, 5, 57-59.
- <sup>18</sup> *SHA*, *Gordiani Tres*, 3, 7; 31, 1.
- <sup>19</sup> *SHA*, *Aurelian*, 33, 4.
- <sup>20</sup> Toynbee (1996) 145; Keller (1913) Vol. 1; 283; Volbach (1976) 53, n. 59.
- <sup>21</sup> Athenaeus 5, 200F; 7, 4, 8; Toynbee (1996) 145-46.
- <sup>22</sup> Pliny, *NH*, 8, 79; 10, 94; 11, 45; Toynbee (1996) 146.
- <sup>23</sup> Toynbee (1996) 146-47; Rackham (1983) 149. Although some references to *dammae*, such as those of Martial cited above, may refer to nothing more than the common deer, Pliny appears to be referring to gazelles when using this term.
- <sup>24</sup> Aelian, *De Natura Animalium*, 10, 23, 25; 11, 9; 14, 14; 17, 31.
- <sup>25</sup> Juvenal 11, 140.
- <sup>26</sup> Pliny, 8, 79; Toynbee (1996) 147.
- <sup>27</sup> Keller (1913) Vol. 1; 291-93.
- <sup>28</sup> *De Re Rustica*, 9, 1, 1.
- <sup>29</sup> Oppian, *Cynegetica*, 1, 440-41.
- <sup>30</sup> Martial, *Epigrams*, 13, 95.
- <sup>31</sup> Oppian, *Cynegetica*, 2, 445-88; Keller (1913) Vol. 1; 292.
- <sup>32</sup> Keller (1913) Vol. 1; 292-93.
- <sup>33</sup> Martial, *Epigrams*, 13, 99.
- <sup>34</sup> Toynbee (1996) 147.
- <sup>35</sup> Toynbee (1996) 146, 148.
- <sup>36</sup> Athenaeus 5, 200F.
- <sup>37</sup> Martial, *De Spectaculis*, 26; Pliny, *NH*, 8, 15; Toynbee (1996) 148-49.
- <sup>38</sup> *SHA*, *Gordiani Tres*, 3, 8; *Probus*, 19, 4.
- <sup>39</sup> Symmachus, *Epistulae*, 9, 144; Jennison (1937) 97.
- <sup>40</sup> Toynbee (1996) 65, 146.
- <sup>41</sup> Toynbee (1996) 146-47.
- <sup>42</sup> Toynbee (1996) 147.
- <sup>43</sup> Pliny, *NH*, 8, 79; 11, 45; Jennison (1937) 97. Although Pliny, in the first passage, calls the latter antelopes *strepsicerotes*, he makes clear in the second passage that they were also called *addaces*.
- <sup>44</sup> Symmachus, *Epistulae*, 9, 144.
- <sup>45</sup> Toynbee (1996) 146.
- <sup>46</sup> Toynbee (1996) 144, 284-85.
- <sup>47</sup> Dunbabin (1978) 57.
- <sup>48</sup> Keller (1913) Vol. 1; 279.
- <sup>49</sup> Jennison (1937) 145; Loisel (1912) 97-98.
- <sup>50</sup> Toynbee (1996) 146-47.

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<sup>51</sup> Toynbee (1996) 26-27, 147.

*Equine Animals:*

The horses that participated in the popular chariot races of ancient Rome only occasionally took part in other public *spectacula*, apart from their use in combats between gladiators driving chariots (*essedarii*).<sup>1</sup> Numerous pieces of Roman art survive depicting mounted huntsmen pursuing various types of game, but these depictions all seem to be set in the wild rather on the arena floor.<sup>2</sup> The accumulated literary and artistic evidence for Roman *venationes* suggests that the *venatores* fought on foot rather than on horseback.

Horses, however, periodically performed military maneuvers to entertain the public. Julius Caesar is said to have included sixty cavalry, 1000 infantry, and 40 elephants in the battle which he staged in the Circus Maximus in 46 BC.<sup>3</sup> Titus is said to have put on an aquatic display in the Colosseum consisting of horses, bulls, and other trained animals performing tricks that they normally executed on dry land.<sup>4</sup> As Coleman states, these tricks may have consisted of a dressage routine: horses and bulls evidently performed such routines in the theatres from time to time.<sup>5</sup> The chariot race that Dio records as taking place on the same occasion was apparently staged on a shallow platform in the *Stagnum Augusti*: Martial, writing of the same event, states that the sea-god Triton witnessed chariots racing through the water.<sup>6</sup>

As Toynbee states, wild horses were also infrequent participants in Roman *spectacula*, likely because they were so similar in appearance to the domesticated horses commonly seen in chariot races, and would consequently not have provided much of a novelty for spectators.<sup>7</sup> Another factor may have been their apparent inability to live for extended periods in captivity: Timotheus records that wild horses under these conditions quickly starved themselves to death.<sup>8</sup> Only on two occasions are wild horses recorded as having been included in imperial *spectacula*: The future Gordian I, when aedile under Septimius Severus, is said to have included 30 such animals in his spectacle, while 40 wild horses collected by his descendant Gordian III

participated in the Secular Games of 248.<sup>9</sup> There is, however, a slight indication that they may have periodically appeared in *venationes* elsewhere in the empire. A mosaic from Cherchel showing a lion killing a wild horse may represent a scene from such a *venatio*, although it could also represent an incident in the wild.<sup>10</sup>

The wild ass, perhaps because of its slightly more 'exotic' nature, evidently participated in more *venationes* and displays than did the wild horse. Pairs of the former animal pulled carts in the procession of Ptolemy II in Alexandria.<sup>11</sup> Although the wild ass was native to Syria, Asia Minor, and Africa, according to Varro and Pliny the most valued specimens of the species came from Phrygia and Lycaonia.<sup>12</sup> The preferred method of capturing the wild ass appears to have been with a lasso rather than a net, as mosaics found in Carthage and Hippo Regius illustrate.<sup>13</sup> The find-spot of these mosaics indicates that 'inferior' wild asses were actually hunted in Africa as well as those from Asia Minor.

According to the literary evidence, such animals participated in imperial *spectacula* on more than one occasion. Martial saw a fine specimen in one of the events he witnessed, while Septimius Severus included wild asses in the 'ship' *venatio* he staged in 202.<sup>14</sup> The future Gordian I is said to have used thirty of these animals in the games he staged as aedile under Severus, while twenty participated in the *venatio* put on by Philip the Arab as part of the Secular Games of 248.<sup>15</sup> Artistic evidence also confirms that wild asses were occasionally included in such *venationes*. The famous *venatio* mosaic from Zliten depicts, amongst numerous other animals, a wild ass pursued by three *venatores* and a dog.<sup>16</sup> The mosaic from a Roman villa in Nennig also depicts a wild ass being attacked by a tiger, presumably in an amphitheatre setting.<sup>17</sup> The hunt mosaic from Hippo Regius shows a group of wild asses, which if not intended as bait to capture other animals, were undoubtedly destined for the games. Such animals are no longer to be found in present-day Algeria, perhaps an indication of the widespread capture of these animals in antiquity.<sup>18</sup> Another *venatio* mosaic from Torre Nuova shows an animal which may

be a wild ass, although this identification is not absolutely certain.<sup>19</sup> One of the diptychs of Areobindus manufactured in 506 depicts what appears to be a wild ass kicking a bear with its hind legs in the arena.<sup>20</sup>

A final equine animal which the Romans at one time experimented with including in their spectacles was the zebra. Dio records that Septimius Severus' praetorian prefect Plautian even went so far as to have some of his centurions steal zebras sacred to Helios from islands in the Red Sea.<sup>21</sup> Unfortunately Dio is not more specific about the name or location of these islands. Since zebras in any case are only native to the mainland of Africa, Jennison speculates that these animals were stolen from the Red Sea islands while en route to Persia, perhaps for one of the Parthian king's menageries.<sup>22</sup> In 212, a zebra was slain in the arena as part of one of Caracalla's *venationes*, presumably one of the animals that Plautian had earlier obtained.<sup>23</sup> Timotheus also records that at one time a team of zebras pulled a chariot in a Roman theatre.<sup>24</sup> After this the sources are silent concerning zebras in the *spectacula*. Such animals, apart from the exceptional undertaking of Plautian, were likely far too difficult and expensive for Roman officials to obtain from their natural habitat in southern Africa.<sup>25</sup> Any breeding stock of these animals which Plautian may have hoped to establish in Rome with his stolen zebras was evidently unsuccessful.

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Notes:

<sup>1</sup> Toynbee (1996) 183-84.

<sup>2</sup> For a discussion of some of these mosaics see Toynbee (1996) 173-75.

<sup>3</sup> Suetonius, *Julius*, 39, 3.

<sup>4</sup> Dio 66, 25, 2.

<sup>5</sup> Plutarch, *Moralia*, 992B; Coleman (1993) 65.

<sup>6</sup> Dio 66, 25, 4; Martial, *De Spectaculis*, 34; Coleman (1993) 66-67.

<sup>7</sup> Toynbee (1996) 167.

<sup>8</sup> Timotheus, *Anon. Matth.*, 49.

<sup>9</sup> *SHA*, *Gordiani Tres*, 3, 7; 33, 1.

<sup>10</sup> Toynbee (1996) 167.

<sup>11</sup> Athenaeus 5, 200F.

<sup>12</sup> Varro, *De Re Rustica*, 2, 6, 3; Pliny, *NH*, 8, 69; Toynbee (1996) 192-93.

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- <sup>13</sup> Toynbee (1996) 25-27, 193: Dunbabin (1978) 55: Anderson (1985) 118-19.  
<sup>14</sup> Martial, *Epigrams*, 13, 100: Dio 77, 1, 5.  
<sup>15</sup> *SHA*, *Gordiani Tres*, 3, 7; 33, 1.  
<sup>16</sup> Toynbee (1996) 30.  
<sup>17</sup> Keller (1913) Vol. 1; 272.  
<sup>18</sup> Loisel (1912) 97.  
<sup>19</sup> Toynbee (1996) 30.  
<sup>20</sup> Volbach (1976) 33, n. 10.  
<sup>21</sup> Dio 76, 14, 3.  
<sup>22</sup> Jennison (1937) 88-89.  
<sup>23</sup> Dio 78, 6, 2.  
<sup>24</sup> Timotheus, *Anon. Matth.*, 10.  
<sup>25</sup> Keller (1913) Vol. 1; 274.



*Rhinoceroses:*

The one and two-horned rhinoceroses which participated in Roman spectacles were obtained respectively from India and Africa, although Roman authors at times appear to have had trouble distinguishing between the two types.<sup>1</sup> Diodorus Siculus mistakingly describes the one-horned rhinoceros as being native to Ethiopia, while Strabo dubiously claims to have seen such an animal from the Arabian Gulf.<sup>2</sup> Pliny also suggests that Ethiopia was actively involved in the trade in rhinoceros horns, if not in the actual animals themselves.<sup>3</sup>

Jennison suggests that the majority of rhinoceroses imported for the Roman *spectacula* came from India rather than Africa, a supposition that receives some support from Pliny's statement that one-horned rhinoceroses were a common sight in Rome.<sup>4</sup> Despite the longer distance the former animals had to travel, their hardiness more than made up for this disadvantage: Jennison estimates that the average Indian rhinoceros survives twice as long as its African counterpart in captivity.<sup>5</sup> If the more common literary references to African rhinoceroses in the later empire are not a mere coincidence, they may suggest that the Romans, with increased experience, became more proficient in safely transporting such animals, or that they were able to successfully breed them in Italy.

Apart from the Piazza Armerina mosaic, very little artistic or literary evidence exists concerning the capture or importation of rhinoceroses by the Romans. The 'Great Hunt' mosaic, assuming its veracity in this respect, shows that the Romans imported adult rhinoceroses for their *spectacula*, but other evidence suggests that the Romans may also have bred rhinoceroses in captivity. As noted above, Pliny specifically mentions a rhinoceros born in Rome (*hic genitus*) and trained to fight elephants.<sup>6</sup>

The date of the rhinoceros' first appearance in Italy is uncertain. As in the case of other exotic animals, the Romans' interest may have been at least partially

stimulated by their inclusion in the great Alexandrian pageant staged by Ptolemy II in 275 or 274 BC.<sup>7</sup> The Roman satirist Lucilius describes one of his targets as looking like a rhinoceros, while among the creatures depicted on the Praeneste mosaic is a two-horned African rhinoceros. Both of these pieces of evidence suggest that at least one rhinoceros may have been displayed in Rome at least by the time of Sulla. A second century BC tomb-painting from Israel depicting a two-horned rhinoceros also suggests that these animals may have been exported from Africa as early as this date.<sup>8</sup>

The first rhinoceros recorded as having taken part in a Roman *spectaculum* was that included in Pompey's exhibition in 55 BC. Pliny describes Pompey's rhinoceros as one-horned, a description which Toynbee suggests may be yet another case of ancient authors confusing the number of horns possessed by African and Indian rhinoceroses.<sup>9</sup> Since the white rhino's second horn is negligible in size, it is understandable that these animals could be described as one-horned: if Ptolemy's rhinoceros did come from Ethiopia rather than India, it may have been a gift from Ptolemy Auletes for restoring him to the throne of Egypt.<sup>10</sup> It is also not impossible, however, that Pompey, during his earlier campaigns in the east, made contacts who were later able to provide him with an 'authentic' one-horned Indian rhinoceros for his spectacle in Rome.

Dio mistakenly records Augustus' *venatio* of 29 BC as marking the first appearance of the rhinoceros, which he describes as being one-horned, in Rome.<sup>11</sup> Suetonius also mentions Augustus' display of a rhinoceros in the Saepta Julia, although this does not appear to have been the same animal as mentioned by Dio. Suetonius specifically records that the rhinoceros in the Saepta was not displayed as part of any public *spectacula*, while the one discussed by Dio was evidently slain as part of such contests.<sup>12</sup> A further spectacle staged by Augustus in AD 5(?) also featured the only specifically recorded combat between an elephant and a rhinoceros in the *venationes*, a combat which reflected the widely held

misconception that these two animals were mortal enemies in the wild.<sup>13</sup> Since Pliny records that rhinoceroses were trained by the Romans to fight elephants, combats such as that mentioned by Dio, at least in the first century AD, must have occurred at least periodically.<sup>14</sup>

Although not specifically recorded by the literary sources, rhinoceroses appear to have taken part in several Italian *venationes* during the first century prior to the destruction of Pompeii. In the passage just cited, Pliny mentions that rhinoceroses like the one that was involved in Pompey's spectacle were a common sight (*saepe visus*).<sup>15</sup> A marble relief from Pompeii depicting, albeit poorly, a two-horned rhinoceros implies that such animals appeared at one time in the city's amphitheatre.<sup>16</sup>

Martial devotes two of his epigrams describing Titus' spectacle of AD 80 to a rhinoceros that performed in the *venatio*, although he does not specify how many horns this particular specimen had.<sup>17</sup> The poet was seemingly much impressed with the ease with which it dispatched such opponents as a bull and a lion. A Roman lamp from Labicum also depicts a combat between a bear and a rhinoceros, much as the poet describes.<sup>18</sup> Evidently Martial was not the only Roman impressed with the animal: one of Domitian's coin-types from only a few years later depicts an African two-horned rhinoceros.<sup>19</sup> This coin-type may allude to Titus' famous spectacle or one of Domitian's own *venationes*. Rhinoceroses may well have been one of the exotic animals said to have been hunted by Domitian in front of an audience on his Alban estate.<sup>20</sup>

Pausanias mentions having seen African rhinoceroses in Rome at some time in the second century, although he does not specify the date.<sup>21</sup> Theoretically they could have been the rhinoceroses which Antoninus Pius is said to have included in one of his *munera* in the capital.<sup>22</sup> Later in the century such animals were apparently among those on which Commodus practiced his archery.

Dio implies that the slaughter of rhinoceroses in the arena was also not an uncommon sight during the reigns of Commodus and Caracalla.<sup>23</sup> A rhinoceros, likely Egyptian, is also said to have been included in Elagabalus' animal collection in Rome, while the menagerie collected by Gordian III in the mid-third century also ostensibly included one such animal, perhaps from the same region.<sup>24</sup> This is the last record of African rhinoceroses in Rome, but the depiction of a one-horned example on the 'Great Hunt' mosaic from Piazza Armerina suggests that the importation of these animals from India continued at an even later date.<sup>25</sup>

Evidently rhinoceros combats were particularly popular with Roman spectators. Martial also describes rhinoceroses at Titus' *spectaculum* involved in single combat with lions, bulls, buffaloes, bison, and bears, much to the detriment of the latter animals.<sup>26</sup> No mention is made in this or any other of the ancient sources of rhinoceroses fighting *venatores* in the arena: perhaps these animals were considered too powerful to be a 'sporting' opponent for men armed only with spears.

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Notes:

<sup>1</sup> Toynbee (1996) 125.

<sup>2</sup> Diodorus Siculus, 3, 35, 2, 3; Strabo, 16, 4, 15.

<sup>3</sup> Pliny, *NH*, 6, 34-35.

<sup>4</sup> Pliny, *NH*, 8, 29.

<sup>5</sup> Jennison (1937) 35.

<sup>6</sup> Pliny, *NH*, 8, 29.

<sup>7</sup> Athenaeus 5, 201C; Toynbee (1996) 125.

<sup>8</sup> Lucilius, 3, 5; Toynbee (1996) 125-26.

<sup>9</sup> Pliny, *NH*, 8, 29; Toynbee (1996) 126.

<sup>10</sup> Gowers (1950) 64-67.

<sup>11</sup> Dio 51, 22, 5.

<sup>12</sup> Suetonius, *Augustus*, 43, 4.

<sup>13</sup> Dio 55, 33, 4; Keller (1913) Vol. 1; 384-85.

<sup>14</sup> Pliny, *NH*, 8, 29.

<sup>15</sup> Pliny, *ibid.*

<sup>16</sup> Toynbee (1996) 126.

<sup>17</sup> Martial, *De Spectaculis*, 11; 26.

<sup>18</sup> Keller (1913) Vol. 1; 385. For a drawing of the scene on this lamp, see Keller (1887) 118, fig. 28.

<sup>19</sup> Toynbee (1996) 126-27.

<sup>20</sup> Suetonius, *Domitian*, 19: Suetonius' statement that many people saw Domitian's hunting exploits implies that they were not merely a private diversion of the

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emperor.

<sup>21</sup> Pausanias 9, 21, 2.

<sup>22</sup> SHA, *Antoninus Pius*, 10, 9.

<sup>23</sup> Dio 73, 10, 3; 78, 6, 2.

<sup>24</sup> SHA, *Elagabalus*, 28, 3; *Gordiani Tres*, 33, 1: Toynbee (1996) 127, 369, n. 21.

<sup>25</sup> Toynbee (1996) 127: Gowers (1950) 69.

<sup>26</sup> Martial, *De Spectaculis*, 11; 26.

*Hippopotami:*

The source from which the Romans obtained the hippos used occasionally in their *spectacula* was, not surprisingly, the Nile. Pliny describes the hippopotamus as being native to that river, while Roman depictions of such animals, such as those found in Praeneste and Pompeii, typically show them in Nilotic landscapes.<sup>1</sup> Although the Praeneste mosaic may date as early as the time of Sulla, the first recorded display of a hippopotamus in Rome occurred some years later, at the games put on in a *temporarius euripus* by the aedile Marcus Scaurus in 58 BC.<sup>2</sup> This animal, as well as the crocodiles exhibited at the same spectacle, may well have been obtained from contacts Scaurus made during his campaign against the Nabataeans a few years earlier.<sup>3</sup>

The next appearance of the hippopotamus in Rome, and possibly the first time one was killed as part of a *spectaculum*, occurred at the games given by Augustus in 29 BC. As in the case of the rhinoceros that appeared on the same occasion, Dio mistakingly asserts that this show marked the hippo's first appearance in the capital.<sup>4</sup> Evidently Dio did not consult Pliny or his source concerning these animals. The next hippopotamus recorded in Rome by the sources is apparently that described by the poet Calpurnius Siculus, thought to have been active in the reign of Nero.<sup>5</sup>

Further hippos were exhibited in the capital in the second century, although not all of them appear to have been specifically recorded by the literary sources. As Toynbee states, the coin-engravers in the Roman mint who designed coins depicting hippos during Hadrian's reign may well have had living specimens in Rome to copy from.<sup>6</sup> An unspecified number of hippos appeared in the games staged by Hadrian's successor Antoninus Pius, likely in 148.<sup>7</sup> Dio also implies that these animals, at least compared with rhinoceroses, were a relatively common sight in his day.<sup>8</sup> Indeed, Commodus is said to have slain in public a total of six hippos on different occasions during his reign.<sup>9</sup>

The remaining notices of hippos on display all come from the *Scriptores Historiae Augustae*, although, apart from the latest notice, there does not seem to be anything inherently implausible in what they record. Elagabalus is said to have kept hippos as part of his menagerie of Egyptian animals in Rome, while six hippos were also included in the vast assortment of animals with which Gordian III planned to celebrate his Persian triumph.<sup>10</sup> The last mention of a tame hippopotamus concerns the Egyptian rebel Firmus in the late third century, who is credited with riding on a tame hippopotamus in addition to other exotic animals.<sup>11</sup>

Two fourth-century sources indicate that the population of hippos in Egypt was seriously depleted by that date, which may be the reason why no such animals are recorded in Roman *spectacula* later than that staged by Firmus. Ammianus Marcellinus states that hippos had migrated south from Egypt, ostensibly due to the depredations of Egyptian hunters.<sup>12</sup> Themistius also implies that such animals were a relative rarity in the Nile marshes of his day.<sup>13</sup> Hunting for the games, however, does not appear to have been a major cause of their decline, given the relatively small number of hippos recorded for various Roman *spectacula*. The progressive dessication of the lower Nile throughout the Roman era, which forced the local rhinoceros population to move further south (see page 231), may have had a similar effect upon the hippopotamus population.

Evidently the thick hide of the hippopotamus remarked upon by Pliny allowed trappers to use a somewhat unorthodox method in their capture, one which well could prove fatal when employed against other animals; namely, barbed harpoons.<sup>14</sup> Jennison confirms that the first hippo shipped to the London Zoological Gardens, as well as one owned by his own family, bore scars from these weapons being used in their capture, although he speculates that the majority of such animals would have been captured by the more traditional pit-method.<sup>15</sup> According to the third century author Achilles Tatius, the latter method consisted of placing a large wooden box in a pit covered by earth and straw. Once the hippo fell through this covering into the

box, the hunters would merely have to run out and close the lid in order to have the captured animal ready for transport.<sup>16</sup> However, tracking hippos may have presented a multitude of problems to their would-be captors: Pliny asserts, somewhat dubiously, that such animals routinely entered fields backwards in order to confuse their hunters and thereby avoid potential ambushes.<sup>17</sup>

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Notes:

<sup>1</sup> Pliny, *NH*, 8, 39: Toynbee (1996) 128-29.

<sup>2</sup> Pliny, *NH*, 8, 40.

<sup>3</sup> For this campaign see Scullard (1970) 106.

<sup>4</sup> Dio 51, 22, 5: Toynbee (1996) 369, n. 12.

<sup>5</sup> Calpurnius Siculus, *Eclogues*, 7, 66-8: Toynbee (1996) 129.

<sup>6</sup> Toynbee (1996) 129.

<sup>7</sup> *SHA*, *Antoninus Pius*, 10, 9: Toynbee (1996) 18.

<sup>8</sup> Dio 51, 22, 5.

<sup>9</sup> Dio 73, 10, 3; 19, 1.

<sup>10</sup> *SHA*, *Elagabalus*, 28, 3; *Gordiani Tres*, 33.

<sup>11</sup> *SHA*, *Firmus*, 6. While I do not object to the possibility of hippos being kept in third-century Rome, I personally find the idea of a pretender to the throne like Firmus riding around on such an animal somewhat comical. This same section of Firmus' biography also records such doubtful feats as riding on ostriches and swimming with crocodiles.

<sup>12</sup> Ammianus Marcellinus 22, 15, 24.

<sup>13</sup> Themistius, *Orationes*, 10, 140.

<sup>14</sup> Diodorus Siculus, 1, 35, 8-10.

<sup>15</sup> Jennison (1937) 147.

<sup>16</sup> Achilles Tatius 4, 2.

<sup>17</sup> Pliny, *NH*, 8, 39.



### *Giraffes:*

One of the more unusual animals included in various Roman *spectacula* was the African giraffe, which also took part at an earlier date in the third century BC procession staged by Ptolemy II in Alexandria.<sup>1</sup> The first to appear in a Roman spectacle was that displayed by Caesar in the Circus Maximus in 46 BC. Both Pliny and Dio, in recording this event, take the opportunity to describe the giraffe at some length, the latter somewhat more accurately than the former.<sup>2</sup> The giraffe that participated in Caesar's display is likely that described by Varro as having been recently imported from Alexandria.<sup>3</sup> Perhaps the animal was a gift from Cleopatra or one of the other allies Caesar had made during his recent campaign in Egypt.<sup>4</sup>

Pliny also mentions that the Romans referred to giraffes as *oves ferae*, due to their somewhat placid nature in the arena. Strabo even goes so far as to call the giraffe a domesticated animal, since "... οὐδεμίαν...ἀγριότητα ἐμφαίνει."<sup>5</sup> From these statements it would appear that giraffes may have been one of the species of animals more often displayed for their outlandish appearance than actually forced to fight in a *venatio*. Despite this, they appeared to have enjoyed a certain measure of popularity under the Julio-Claudian emperors. Horace records a giraffe along with a white elephant attracting the crowd's attention at an unspecified *spectaculum* staged by Augustus, while an excerpt from Pliny implies that giraffes took part in more than one spectacle in the Julio-Claudian period subsequent to that of Caesar (...*subinde* [the giraffe] *cernitur aspectu magis quam feritate conspicua*).<sup>6</sup> The relative accuracy of giraffe descriptions written by various ancient authors in different areas of the empire, such as Caesius Bassus in Antioch and Pausanias in Rome, also suggests that displays of these animals were not rare. The docile nature of giraffes commented upon by these same authors would undoubtedly make them a much easier animal to capture and transport than many other exotic species.<sup>7</sup>

They continued to participate on occasion in Roman *spectacula* of the second and third centuries AD. Pausanias records seeing a giraffe in Rome at some point during his lifetime, while a giraffe is said to have been numbered among the animals which Commodus himself slew in public.<sup>8</sup> A wall-painting found in the Villa Pamphili [?] near Rome, depicting a giraffe with a bell around its neck being led on a rope, may also allude to such spectacles during this period.<sup>9</sup> Ten giraffes were included in the Secular Games staged by Philip the Arab in 248, although it is unclear whether they were slaughtered or merely displayed.<sup>10</sup> The last recorded display of giraffes in Rome belongs to 274, when they were part of the large assortment of animals used in Aurelian's triumphal procession celebrating his victory over the Palmyrenes.<sup>11</sup>

Although some Romans, like the sarcophagus artisan responsible for including a giraffe in a depiction of Dionysus' Indian triumph, mistakenly thought giraffes were native to India as well as Africa, written evidence suggests that Rome in fact may have obtained such animals exclusively from Ethiopia.<sup>12</sup> Strabo locates the giraffe in the Arabian Gulf region, which includes coastal Ethiopia, while in his description of the giraffe Pliny even goes so far as to give the Ethiopian name for the animal.<sup>13</sup>

Pausanias' mention of an Indian giraffe, if not a simple geographical error, may be a case of confusing Aksum in Ethiopia with India, a not uncommon error in antiquity.<sup>14</sup> In his third-century romance *Aethiopica* Heliodorus recounts how an embassy from Aksum sends a giraffe to king Hydaspes.<sup>15</sup> This fictional account may well reflect where the Romans were obtaining their giraffes for contemporary *spectacula*. The kingdom of Aksum is known to have shipped elephants to Constantinople on at least one occasion: they may also have been involved in supplying giraffes to the Romans at an earlier date.<sup>16</sup>

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Notes:

- <sup>1</sup> Athenaeus 5, 201C.
- <sup>2</sup> Pliny, NH, 8, 27; Dio 43, 23, 1-2; Toynbee (1996) 141-42.
- <sup>3</sup> Varro, *De Lingua Latina*, 5, 20 (100).
- <sup>4</sup> Jennison (1937) 30.
- <sup>5</sup> Strabo 16, 4, 16.
- <sup>6</sup> Horace, *Epistulae*, 2, 1, 195-96; Pliny, NH, 8, 27.
- <sup>7</sup> Keller (1913) Vol. 1; 284.
- <sup>8</sup> Pausanias 9, 21, 2; Dio 73, 10, 3.
- <sup>9</sup> Toynbee (1996) 142; Keller (1913) Vol. 1; 284.
- <sup>10</sup> SHA, *Gordiani Tres*, 33, 1-2.
- <sup>11</sup> SHA, *Aurelian*, 33.
- <sup>12</sup> For the sarcophagus see Toynbee (1996) 142.
- <sup>13</sup> Strabo 16, 4, 16; Pliny, NH, 8, 27.
- <sup>14</sup> Pausanias 9, 21, 2; For the confusion of Aksum and India see Burstein (1992) 56, n. 6.
- <sup>15</sup> Heliodorus, *Aethiopica*, 10, 27-28; Toynbee (1996) 142.
- <sup>16</sup> For Aksumite elephants obtained by the eastern Roman empire, see Burstein (1992) 56-57.

*Ostriches and other Birds:*

One of the species of birds that most fascinated the Romans was the ostrich, as suggested by Pliny's choosing to discuss it first in the section of his work dealing with avian creatures.<sup>1</sup> Pliny locates the ostrich in Africa and Ethiopia, while later authors describe its range as being somewhat more limited: Lucian states that the Garamantes in North Africa commonly hunted the ostrich, while Claudian describes it being pursued by hunters in Libya.<sup>2</sup> Synesius also records the shipment of ostriches from Cyrene to Rome as late as the fifth century AD.<sup>3</sup> Unfortunately the origin of the sixteen harnessed ostriches which participated at a much earlier date in Ptolemy II's zoological procession, as well as those said to have been ridden by his wife Arsinoe, is not recorded by the ancient sources.<sup>4</sup> Gregory of Cyrene confirms that ostriches were being shipped abroad from his home city as late as the fifth century, although this trade was evidently disrupted by the contemporary problems caused by enemy fleets in the Mediterranean.<sup>5</sup>

Ptolemy II's procession may have inspired the importation of ostriches into Rome, apparently at an even earlier date than many other creatures. According to Plautus, one could see ostriches running in the Circus Maximus as early as the third century BC, although it seems doubtful that they were involved in any organized *spectaculum* at this early date.<sup>6</sup> Regardless of what type of public exhibition, if any, Plautus is alluding to, no other Republican sources record any similar displays by these birds. Ostriches evidently lost their novelty for the Roman populace relatively soon after their appearance in the capital city. However, the fact that Corbulo reduced one of his unfortunate rivals in the Senate to tears by calling him a "plucked ostrich", may suggest that they were still commonly seen in Roman *spectacula* of the first century AD. Jennison even suggests that plucked ostriches may have been occasionally displayed in the arena as a light-hearted spectacle for the audience.<sup>7</sup>

In fact, the next recorded public exhibitions of ostriches date to approximately 400 years after Plautus: Herodian describes Commodus, as part of his public display of hunting prowess, decapitating Mauretanian ostriches with arrows specially adapted for the purpose. The same event is alluded to by Dio's famous description of the emperor threatening various senators, including himself, with a severed ostrich head.<sup>8</sup> Only a few years later Septimius Severus included a number of these animals in the elaborate 'ship' *venatio* which he staged to celebrate his *decennalia* in 202, as well as the Secular Games two years later.<sup>9</sup>

In the late second and early third century ostriches appear to have enjoyed renewed popularity in Rome. The *SHA* records a number of highly dubious anecdotes from the third century, such as Elagabalus giving ostriches as lottery prizes, which if not factually accurate, may nonetheless reflect the bird's popularity at that time.<sup>10</sup> The future Gordian I's animal *spectaculum* which he staged as aedile under Severus is said to have included 300 red-feathered Mauretanian ostriches.<sup>11</sup> The *SHA* also credits Probus, somewhat dubiously, with including 1000 ostriches in the *venatio* he is said to have put on in the Circus Maximus: the contemporary pretender Firmus, in addition, is said to have ridden on large ostriches in public.<sup>12</sup> If the large number of such animals quoted for these spectacles is at all related to the actual number of ostriches used in these or other imperial events, one would think, as Toynbee suggests, that an imperial ostrich-farm may have existed in Italy to supply the requisite number of animals needed for such events.<sup>13</sup> This is not at all implausible: as discussed previously, other animals like elephants definitely had their own imperial game-preserve in Italy. In addition, as Jennison states, ostriches would have been perfectly comfortable in the warm climate of Italy, and enclosures could have been set up for these flightless birds without great expense.<sup>14</sup>

Numerous Roman mosaics also attest to the appearance of ostriches in the *spectacula*. Medallions found on mosaics from both Djemila and Thuburbo Maius depict ostriches as well as other common *venatio* animals, while an ostrich in some

sort of arena spectacle is also shown on a mosaic from Theveste.<sup>15</sup> Two of these animals, in combat with two *venatores* and two dogs, are amongst the numerous animals featured in the *venatio* scenes on the border of the Zliten mosaic. A mosaic from Carthage, which evidently displays the number of different animals which participated in a particular spectacle, indicates that 25 ostriches took part on that occasion, the second highest of the preserved animal numbers. An ostrich is also included in the similar 'numbered' *venatio* mosaic from Radez.<sup>16</sup> Other works of Roman art also confirm the ostrich's participation in various *venationes* throughout the empire. A relief found at Heiropolis in Syria depicts an ostrich being attacked by a lioness, while a carved gemstone shows a *venatio* scene involving various animals including an ostrich, wild ass, and wolf.<sup>17</sup>

Another fragmentary North African mosaic found in Le Kef also features ostriches in a somewhat unusual *venatio* scene (Fig. 15). Apart from the approximately twenty ostriches, deer are the only other animals to appear in this mosaic. As Toynbee suggests, the mosaicist has done his or her best to make this arena scene appear like a hunting expedition out in the wild. Hunting nets are positioned at the edges of the mosaic, while two men, about to release the eager dogs accompanying them, cover each of the gaps between these nets. The only indication that the setting for this mosaic is in fact the arena is given by the numerous rose petals lying on the ground: the scattering of these flowers was evidently a common enough occurrence at public spectacles.<sup>18</sup> If this mosaic does represent an actual *venatio*, as seems likely enough, the *editor* of this particular event apparently attempted to increase the suspense and excitement of the audience by creating the illusion that the action was taking place in the wild, rather than within the 'tamer' confines of the amphitheatre.

Despite the large population of ostriches to be found in North Africa in antiquity, the relative difficulty of capturing them is aptly commented upon by Oppian, who states that they can only be captured by the swiftest horses and dogs, or

by well-hidden traps.<sup>19</sup> Various pieces of Roman art depict this hunting of ostriches in the wild, as imitated in the *venatio* represented by the Le Kef mosaic. One fragmentary relief from the *mausolea* found at Ghirza in North Africa shows ostriches and an antelope in full flight, presumably from unseen huntsmen, while another depicts a large ostrich being pursued by a mounted hunter and his two dogs.<sup>20</sup> Two North African mosaics, one from Hippo Regius and the other from Utica, depict ostriches, along with other animals such as antelopes, being driven into nets like those shown on the Le Kef mosaic. The ground in the Utica mosaic is so marshy that the hunters have been forced to pursue the ostriches in boats rather than on horseback, as they undoubtedly would have preferred under normal circumstances.<sup>21</sup>

One of the most famous representations of a captive ostrich is on the 'Great Hunt' mosaic of Piazza Armerina, where two hunters each carry an ostrich up the gangplank of a transport-ship, while another man carries another bird down the gangplank on the other side of the same vessel. As Toynbee remarks, this depiction may well be somewhat fanciful: since the Egyptian ostrich is said to weigh approximately 350 pounds, it is most unlikely that a single man could carry an ostrich as depicted on the mosaic.<sup>22</sup> The ostriches were more likely transported in cages carried by two or more individuals, a method of animal transport seen in several Roman mosaics.

Cock-fighting was a popular spectator sport in Roman society from the second century BC onwards, although such displays were normally on a far more limited scale than the imperial *venationes*.<sup>23</sup> Cocks noted for their fighting prowess were imported into Italy from Greece, and even as far away as Persia.<sup>24</sup> According to Pliny, a public spectacle was staged every year at Pergamum in which cocks fought like gladiators (*gallorum....gladiatorum*), although this particular spectacle may well have predated Roman control of the city.<sup>25</sup> However, Varro states that wild cocks (*gallinae rusticae*) and parrots were periodically involved in public shows at Rome,

perhaps another example of the inter-species fighting the Romans were evidently so fond of.<sup>26</sup>

The crane is another bird that appeared in Roman *spectacula* on at least one occasion, although it was evidently far more popular amongst the Romans as a delicacy.<sup>27</sup> Pliny reports that Indian cranes could be tamed and taught to perform various maneuvers in flight, but it is unclear whether or not he is referring to private pets or birds that may have appeared in public at one time or another.<sup>28</sup> Dio records that Titus, as part of his *spectaculum* staged in AD 80, did indeed include a combat between cranes.<sup>29</sup>

Parrots and blackbirds, surprising as it may seem, also participated on occasion in public spectacles, although not in the huge shows staged by emperors like Titus. The zoological procession of Ptolemy II, where several parrots were carried in cages, may have inspired the Romans to also include these birds in more modest public events.<sup>30</sup> Although Indian parrots were more popular among the Romans as personal pets, both for emperors and commoners alike, Varro records that they did also occasionally appear in public displays.<sup>31</sup> In this same passage Varro also mentions the display of rare white blackbirds in Rome, which may well have been imported from Mount Cyllene in Greece, since both Pliny and Pausanias state, mistakingly, that such birds were only native to that region.<sup>32</sup> At least one scholar, however, has suggested that these birds may in reality have been snowfinches, since modern researchers have failed to find any white blackbirds on Mount Cyllene.<sup>33</sup>

Another bird that ostensibly participated in at least one Roman display was the phoenix, although Pliny has the good sense to strongly doubt such an event ever occurred (*....quem [the phoenix] falsum esse nemo dubitaret*).<sup>34</sup> Since, however, the *acta senatus* recorded that this display occurred in the Comitium in AD 47, a bird of some type must have been passed off as a phoenix on this occasion. Evidently the average member of the Roman populace was far more gullible than even Pliny gave them credit for. Jennison suggests that the actual bird exhibited was the golden



pheasant from the Far East, which is unlikely to have been seen by many Romans prior to its appearance in the city.<sup>35</sup>

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Notes:

<sup>1</sup> Pliny, *NH*, 10,1

<sup>2</sup> Lucian, *De Dipsadibus*, 2, 6, 7; Claudian, *In Eutropium*, 2, 310-16.

<sup>3</sup> Synesius, *Epistulae*, 134: Keller (1913) Vol. 2; 173.

<sup>4</sup> For the ostriches in Ptolemy II's procession see Athenaeus 5, 200F: for Arsinoe's ostrich-mounts see Pausanias 9, 31, 1.

<sup>5</sup> Gregory of Cyrene, *Epistulae*, 133: Toynbee (1996) 238-39.

<sup>6</sup> Plautus, *Persa*, 198-99.

<sup>7</sup> Seneca, *De Constantia*, 17, 1; Jennison (1937) 115, n. 2.

<sup>8</sup> Herodian 1, 15, 5-6: Dio 73, 21, 1.

<sup>9</sup> Dio 77, 1: Alföldi-Rosenbaum (1970) 11-12.

<sup>10</sup> *SHA*, *Elagabalus*, 22, 1; 28, 4; 30, 2; *Firmus*, 4, 2: Toynbee (1996) 240: Alföldi-Rosenbaum (1970) 12, n. 1.

<sup>11</sup> *SHA*, *Gordiani Tres*, 33, 1.

<sup>12</sup> *SHA*, *Probus*, 19, 4; *Firmus*, 6, 2: Alföldi-Rosenbaum (1970) 12-13.

<sup>13</sup> Toynbee (1996) 238.

<sup>14</sup> Jennison (1937) 115-16.

<sup>15</sup> Toynbee (1996) 239.

<sup>16</sup> Toynbee (1996) 30-31: Keller (1913) Vol. 2; 173.

<sup>17</sup> Keller (1913) Vol. 2; 173. As Robert notes, a number of coins from the eastern empire depicting ostriches appear to indicate the periodic participation of these animals in local animal- spectacles: see Robert (1949) 128-31.

<sup>18</sup> Toynbee (1996) 239-40.

<sup>19</sup> Oppian, *Cynegetica*, 3, 482-89: Keller (1913) Vol. 2; 171-72.

<sup>20</sup> Toynbee (1996) 240.

<sup>21</sup> Toynbee (1996) 26-27, 238: Dunbabin (1978) 55.

<sup>22</sup> Toynbee (1996) 238, 392, n. 10.

<sup>23</sup> Toynbee (1996) 257.

<sup>24</sup> Ibid: Varro, *De Re Rustica*, 3, 9, 6: Columella, *De Re Rustica*, 8, 2, 4-5; 2, 12.

<sup>25</sup> Pliny, *NH*, 10, 25.

<sup>26</sup> Varro, *De Re Rustica*, 3, 9, 17.

<sup>27</sup> For cranes as food items, see Toynbee (1996) 243-44.

<sup>28</sup> Pliny, *NH*, 10, 30. For Pliny's localization of these cranes, see 6, 70 and 7, 26.

<sup>29</sup> Dio 66, 25, 1. Although Dio does not specify, this combat perhaps was a 'reenactment' of the battle between the pygmies and cranes, a familiar *topos* in classical literature: personal communication, Dr. H. Williams, Dept. of Classical, Near Eastern and Religious Studies, University of British Columbia.

<sup>30</sup> Athenaeus 5, 201B.

<sup>31</sup> Varro, *De Re Rustica*, 3, 9, 17. For parrots as Roman pets see Toynbee (1996) 248. As discussed by Toynbee [247], the Romans were apparently only aware of the green parrot, which they claimed was native to India and east Africa: see e.g. Pliny, *NH*, 6, 35; 10, 58.

<sup>32</sup> Pliny, *NH*, 10, 45: Pausanias 8, 17, 3: Toynbee (1996) 277: cf. Jennison (1937) 116-17.

<sup>33</sup> Levi (1988) Vol. 2; 413, n. 126.

<sup>34</sup> Pliny, *NH*, 10, 2.

<sup>35</sup> Jennison (1937) 110.

### Monkeys:

Although the various types of simians do not appear to have been frequent participants in Roman *spectacula*, monkeys were evidently kept as pets by many Romans as early as the third century BC. Three of Plautus' plays, *Mercator*, *Poenulus*, and *Miles Gloriosus*, mention such animals, with a character in the latter play explaining his presence on another's roof by stating that he is in pursuit of a monkey.<sup>1</sup> Both Pliny and Martial attest to the continued popularity of these animals as pets into the first century AD.<sup>2</sup> In addition, a number of Roman grave reliefs also depict such animals interacting with their human masters.<sup>3</sup> The cleverness of such animals was recognized long before the Roman empire came into being: as early as the fourth century BC the comic Eubolos mocked the popularity of monkeys in Athens, while Aelian records baboons in Ptolemaic Egypt who performed various tricks like dancing for money.<sup>4</sup>

Despite the fact that monkeys were native to India, those that were used by the Romans for public entertainment all appear to have come from Africa. The expense of shipping these animals from India was likely prohibitive, especially when monkeys were available much closer at hand.<sup>5</sup> According to Jennison, the Barbary ape and various varieties of the *cercopithecus*, a long-tailed ape native to Ethiopia, were likely the most common simians imported into Rome as pets, a conjecture supported by the evidence of ancient artwork depicting such animals.<sup>6</sup> The fourth-century author Philostorgius records the king of India presenting the emperor in Constantinople with a 'goat-monkey', but judging by the fact that this animal supposedly resembled a satyr, the trustworthiness of this anecdote has rightly been called into question.<sup>7</sup>

The exact species of African monkeys that participated in Roman *spectacula* is difficult to ascertain. Strabo states that κῆβοι, native to present-day Ethiopia, were monkeys the size of gazelles, with lion-like faces and bodies similar to that of a πάνθηρ

(leopard?). According to the same author, they were also worshipped at Memphis.<sup>8</sup> Aelian, in his more detailed description, records that these animals were found on the coast of the Red Sea, had multi-coloured fur, and grew to the size of an Eretrian hound.<sup>9</sup> Keller assumes that the κῆβοι were baboons, while Jennison maintains that ancient descriptions of this animal most closely fit the colourful nisnas guenon or keb, native to northeast Africa. An engraving of this animal at Latopolis suggests that, as Strabo states, it was an object of worship in antiquity.<sup>10</sup> As Jennison assumes, the *cephi* mentioned by Pliny in all likelihood correspond to the κῆβοι described by Strabo.<sup>11</sup> What may have been the only *cephi* ever exhibited in Rome, at the games of Pompey in 55 BC, were also from Ethiopia according to Pliny.<sup>12</sup> A favoured method for capturing simians in Africa was evidently through the use of wine: due to their fondness for this beverage, the animals would drink any that had been left out for them by the hunters, after which they were easy prey.<sup>13</sup>

Baboons, normally called *cynocephali* by the Romans, are stated by Pliny to be native to Ethiopia.<sup>14</sup> Although there is no explicit record of their performing in Roman *spectacula*, a curious anecdote in Cicero's correspondence may suggest their participation in just such an event, albeit on a smaller scale. Cicero mentions to Atticus running into a certain Publius Veditius, a friend of Pompey's, while he was in Laodicea in 50 BC.<sup>15</sup> Included in Veditius' large retinue were horses, slaves, a number of wild asses, and most curious of all, a baboon sitting in a chariot. It is conceivable that at least some of these animals, in particular the baboon and wild asses, were intended for some sort of local animal spectacle. Unless the range of the baboon extended to Asia Minor in antiquity, one must assume that Veditius had imported the animal, be it as potential pet or arena animal, prior to his meeting with Cicero. The wrinkled face of the Numidian *mater simia* described by Juvenal, if it was suggested to the poet by the appearance of a baboon, may imply that such animals were not unknown in Rome at a much later date.<sup>16</sup>

Both Martial and Juvenal appear to allude to monkeys performing as part of the violent *spectacula* in the arena in the late first and early second centuries AD. Martial records with admiration the agility of a *cercopithecus* in dodging spears, which were presumably thrown at it by *venatores* in the arena. Juvenal mentions a monkey being taught to ride a goat in armour and to throw spears, evidently part of another arena spectacle.<sup>17</sup> Aelian also records having seen a monkey, in this case a Barbary ape, driving a chariot, likely as part of another *munus*.<sup>18</sup> Monkeys may also have periodically featured in the mythological reenactments frequently staged in the arena: in his *Metamorphoses* Apuleius describes an ape in an Isaic procession dressed up as Ganymede, carrying a golden cup and wearing a Phrygian robe and hat. A Roman clay lamp also depicts an ape in the guise of Ganymede being carried off by an eagle.<sup>19</sup> A wall-painting from Pompeii depicting three baboons dressed up as Aeneas, Ascanius, and Anchises may represent an actual performance by some of these animals, perhaps in the theatre or amphitheatre. Two depictions of monkeys as Orpheus, one on a mosaic from Sousse, and another on a glass vessel from Cologne, may also reflect actual public performances.<sup>20</sup>

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Notes:

<sup>1</sup> Plautus, *Miles Gloriosus*, 162, 179; *Mercator*, 229-33; *Poenulus*, 1073-74: Jennison (1937) 127; Toynbee (1996) 56.

<sup>2</sup> Pliny, *NH*, 8, 80; Martial, *Epigrams*, 7, 87, 4: Toynbee (1996) 56.

<sup>3</sup> Keller (1913) Vol. 1; 4.

<sup>4</sup> Aelian, *De Natura Animalium*, 6, 10: Keller (1913) Vol. 1; 4: Toynbee (1996) 57-58.

<sup>5</sup> Jennison (1937) 128.

<sup>6</sup> Jennison (1937) 127: Martial twice mentions *cercopithecus* in his epigrams: see 7, 87 and 14, 202: For the identification of the *cercopithecus*, see Shackleton-Bailey (1993) Vol. 3; 307.

<sup>7</sup> Keller (1913) Vol. 1; 10-11.

<sup>8</sup> Strabo 16, 4, 16; 17, 40, 1.

<sup>9</sup> Aelian, *De Natura Animalium*, 17, 8.

<sup>10</sup> Keller (1913) Vol. 1, 9: Jennison (1937) 55.

<sup>11</sup> Jennison (1937) 55.

<sup>12</sup> Pliny, *NH*, 8, 28: Toynbee (1996) 55.

<sup>13</sup> Keller (1913) Vol. 1; 5.

<sup>14</sup> Pliny, *NH*, 6, 35: Toynbee (1996) 56.

<sup>15</sup> Cicero, *Epistulae ad Atticum*, 6, 1, 25.

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<sup>16</sup> Juvenal 10, 94-95: Jennison (1937) 128.

<sup>17</sup> Martial, *Epigrams*, 14, 202: Juvenal 5, 153-55: Toynbee (1996) 58.

<sup>18</sup> Aelian, *De Natura Animalium*, 5, 26: Toynbee (1996) 57: Jennison (1937) 129.

<sup>19</sup> Apuleius, *Metamorphoses*, 11, 8: Toynbee (1996) 355, n. 24.

<sup>20</sup> Toynbee (1996) 58-59.

*Crocodiles and Snakes:*

As Toynbee states, many Romans evidently found the crocodile interesting enough to visit in its native Egypt, rather than wait for it to be brought to Rome: as early as the second century BC Roman senators were visiting Arsinoe to see the tame crocodiles there.<sup>1</sup> Strangely enough, these animals evidently did not appear in Ptolemy II's famous Alexandrian spectacle, which seems to have included just about every other exotic species of animal known at the time. The first recorded appearance of crocodiles in Rome took place in 58 BC, when Marcus Scaurus as aedile displayed five such animals along with a hippopotamus in a temporary water-channel he had excavated for the purpose.<sup>2</sup>

Augustus, who may well have brought crocodiles back with him from his conquest of Egypt, exhibited them at least twice during his reign. Strabo records that on the first occasion (perhaps soon after the emperor's return from the east?), Egyptians, who travelled to the capital along with the crocodiles dug a pool with an overhanging platform for the display: the crocodiles were dragged out of the pool in nets, so as to be more visible to the public, and then returned to the water.<sup>3</sup> On the second occasion, in 2 BC, 36 crocodiles were slain in the flooded Circus Flaminius as part of the games associated with the opening of the temple of Mars Ultor. As Toynbee suggests, at least some of these animals may have been those exhibited earlier in the spectacle mentioned by Strabo.<sup>4</sup>

According to the literary sources, crocodiles were only sporadically involved in succeeding imperial *spectacula*, despite the fact that such animals, once captured, would have been relatively easy to transport.<sup>5</sup> Antoninus Pius is said to have displayed crocodiles along with other animals at one of his spectacles, likely that staged in 148 to celebrate his *decennalia*.<sup>6</sup> The *SHA* records that a crocodile was amongst the Egyptian animals Elagabalus kept in Rome, although it does not specify whether he ever displayed it to the public or not.<sup>7</sup>

At least in the later empire, however, crocodiles do appear to have occasionally participated in public *spectacula*. In Symmachus' day, the display of such animals was apparently among the most sought after of theatrical spectacles, although the supply of crocodiles in Rome was evidently quite limited.<sup>8</sup> Symmachus hoped to add crocodiles to his praetorian games, provided he received a little divine intervention (*deo iuvante*).<sup>9</sup> Symmachus did manage to obtain the requisite crocodiles, and even attempted, albeit unsuccessfully, to maintain a collection of such animals in Rome. Unfortunately, perhaps due to the Romans' ignorance of crocodile dietary requirements, Symmachus' animals refused to eat for fifty days, and most were therefore killed off in a subsequent *venatio*.<sup>10</sup>

If the relevant artistic evidence is any indication, crocodiles may have often been paired with their Egyptian counterpart, the hippopotamus, in the arena. Several such depictions, at least some of which were possibly based on Roman *spectacula*, show the two species locked in combat. Timothy of Gaza also states that crocodiles are commonly eaten by hippos, a comment that was likely based on a *venatio* rather than on an observation in the wild.<sup>11</sup> Crocodiles, however, could also be pitted against more unusual opponents in the arena: a Roman(?) carved gemstone depicts a tiger dispatching a crocodile, a scene almost certainly taken from a *venatio*.<sup>12</sup>

The unusual methods of capturing crocodiles recorded by Pliny and Timothy of Gaza, neither of which sounds especially plausible, were in any event likely not those commonly used to capture such animals for the *spectacula*. Pliny describes a dangerous-sounding technique of driving crocodiles to shore practiced by the inhabitants of the island of Tentyrus in the Nile. These individuals would swim into the Nile, jump onto a crocodile's back, and then insert a staff into the reptile's mouth when it attempted to bite them. Grasping the staff on either side of the crocodile's mouth, the hunter would then use it to steer the crocodile towards shore.<sup>13</sup> An even more unusual method is recorded by Timothy of Gaza at a much later date. According

to this source, a hunter would smear himself with crocodile fat, presumably so that the crocodile would not be interested in him as a meal, before jumping into the Nile. Once the hunter had captured his quarry, the crocodile could be turned onto its back by means of an unspecified song or spell (ἐπωδή).<sup>14</sup> In all probability, however, crocodile hunters likely used the same techniques which Herodotus had mentioned centuries earlier. Using a pig-carcass and hook to drag the reptile to land would be much safer than actually diving into the Nile after it.<sup>15</sup>

According to the literary sources, snakes of different varieties were often kept as household pets by many Romans, including such notables as Tiberius and Elagabalus, but were only displayed once in public.<sup>16</sup> Augustus is said to have shown a 75 foot long snake to the public in front of the Comitium, not as part of a regular *munus*, but as an ad hoc spectacle.<sup>17</sup> No mention is made in the sources of whether or not Augustus publicly exhibited the snakes he received as a gift from an Indian embassy.<sup>18</sup> Thereafter, spectacles involving snakes appear to have ceased: huge snakes such as that shown by Augustus were undoubtedly hard to come by, and the tame snake's relative ubiquitousness in Rome likely made it a less than ideal choice for spectacles in which the Roman populace was used to seeing far more exotic or dangerous animals.

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Notes:

<sup>1</sup> Strabo 17, 1, 38; Plutarch, *De Sollertia Animalium*, 976B; Aelian, *De Natura Animalium*, 8, 4; Toynbee (1996) 218.

<sup>2</sup> Pliny, *NH*, 8, 40.

<sup>3</sup> Strabo, 17, 1, 44.

<sup>4</sup> Dio 55, 10, 8; Toynbee (1996) 219.

<sup>5</sup> Jennison (1937) 64, n. 3.

<sup>6</sup> *SHA*, *Antoninus Pius*, 10, 9; Toynbee (1996) 18.

<sup>7</sup> *SHA*, *Elagabalus*, 28, 3.

<sup>8</sup> Symmachus, *Epistulae*, 9, 141.

<sup>9</sup> Symmachus, *Epistulae*, 9, 151.

<sup>10</sup> Symmachus, *Epistulae*, 6, 43.

<sup>11</sup> Timothy of Gaza, *De Animalibus*, 44; Keller (1913) Vol. 2; 267.

<sup>12</sup> Keller (1913) Vol. 2; 601, n. 237.

<sup>13</sup> Pliny, *NH*, 8, 78.



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<sup>14</sup> Timothy of Gaza, *De Animalibus*, 42.

<sup>15</sup> Herodotus 2, 70.

<sup>16</sup> For the various references to snakes as pets, see Toynbee (1996) 224.

<sup>17</sup> Suetonius, *Augustus*, 43, 4: Toynbee (1996) 224. Unless there is a numerical error in the manuscript of Suetonius, he or his sources are guilty of exaggeration. The longest recorded snake ever captured (a reticulated python) was 32 feet, nine inches in length: personal communication, Deanna Snell, Calgary Zoo. Tall tales of gigantic snakes appear to have originated with Greek accounts of Indian fauna. Strabo reports (at second-hand) snakes as long as 140 cubits (210 feet): see French (1994) 336, n. 29.

<sup>18</sup> Strabo 15, 1, 73.

### *Hyenas:*

The majority of hyenas that were exhibited in Rome were in all likelihood obtained from Africa, or Ethiopia in particular. Pliny states that most hyenas come from Africa, while Diodorus Siculus describes these animals as a mixed breed of dog and wolf native to Ethiopia.<sup>1</sup> Some hyenas, however, may also have been imported from the East. Dio states that hyenas brought to Rome under Septimius Severus were Indian in origin, which if not an error, may merely refer to Asia in general. A hyena is also included amongst the animals featured in the 'Worcester Hunt' mosaic from Antioch, which also depicts the capture of tigers, animals that were definitely obtained from the east for Roman spectacles.<sup>2</sup>

According to the *Scriptores Historiae Augustae*, the first exhibition of these animals in Rome took place under Antoninus Pius, while Dio maintains that Septimius Severus in 202 was the first emperor to bring these animals to Rome as part of the games celebrating his son's wedding.<sup>3</sup> Assuming Dio's contemporary account to be the more trustworthy of the two, this contradiction may perhaps be explained by the author of the *Scriptores Historiae Augustae* mistaking one Antoninus for another in his sources, and thereby erroneously placing the introduction of hyenas to Rome at an earlier date. The only other literary reference to hyenas in the *spectacula* concerns ten such animals from Gordian III's collection included in the *venatio* which Philip the Arab staged for the Secular Games of 248.<sup>4</sup> Although hyenas existed within the frontiers of the Roman empire, and were relatively easy to capture and tame, such animals would not make good participants in a *venatio* because of their cowardice: according to Jennison, those hyenas which did appear in imperial spectacles may have been gifts from the Ethiopians, which were displayed to the Roman populace.<sup>5</sup>

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Notes:

<sup>1</sup> Pliny, NH, 8, 46: Diodorus Siculus, 3, 35, 10.

<sup>2</sup> Dio, 76, 1, 4: Toynbee (1996) 92.

<sup>3</sup> SHA, *Antoninus Pius*, 10, 9: Dio, 76, 1, 4.

<sup>4</sup> SHA, *Tres Gordiani*, 33, 1.

<sup>5</sup> Jennison (1937) 85.

*Canines:*

Canines as a whole do not appear to have played a major role in Roman animal *spectacula*. As noted previously, a single carved gemstone records the participation of wolves in Roman *venationes*.<sup>1</sup> Wolves may have simply not provided much entertainment for spectators, particularly when compared with larger and more aggressive animals like bears. Due to the importance of the wolf in Roman tradition, the slaughter of this animal, at least in Rome itself, may also have been frowned upon.<sup>2</sup>

The main function of dogs in connection with the *spectacula*, as shown by countless pieces of artistic evidence, was in assisting their masters in the capture of animals destined for the games.<sup>3</sup> Other such evidence attests to the fact that dogs on occasion actually assisted the *venatores* in dispatching various animals within the arena. Martial records an episode from Titus' spectacle in AD 80 in which a hind was pursued by Molossian hounds in the Colosseum, and was only spared by them because of the emperor's intercession.<sup>4</sup> Martial records the epitaph of a dog raised by the *amphitheatrales magistros* and slain by a boar.<sup>5</sup> Unfortunately it is unclear whether this dog's death occurred in the amphitheatre or on a hunting expedition. It does not seem unreasonable to suppose that some such dogs were bred by officials associated with the *venationes* both to help capture animals in the wild and, from time to time, to assist the *venatores* during the spectacles in Rome.

On occasion, dogs could evidently form one of the main attractions of a *spectaculum*. As a response to arrogant charioteers, Nero's praetor Aulus Fabricius is said once to have hitched dogs to the chariots in the Circus Maximus instead of horses. Only a few years later, during the reign of Vespasian, a dog performed an elaborate death-scene during a mime in the Theatre of Marcellus.<sup>6</sup> Symmachus records that the entry of seven Irish wolfhounds(?) into Rome on the *dies*

*praelusionis* caused as much interest in the city as the other animals imported for the *venationes*.<sup>7</sup>

A final canine periodically involved in Roman spectacles was the fox. The spectacle in which it participated was, unfortunately, one of the grisliest of Roman animal events. Each year, during the *Ludi Cereales*, a number of foxes, with torches attached to their tails, were released into the Circus Maximus, where they would burn to death in front of the audience. The purpose of this ritual, according to Ovid, was atonement for an earlier fox that set crops ablaze in Carseoli, after having been lit on fire by a child.<sup>8</sup> As Scullard suggests, however, the real purpose behind this strange event may have been to act as a ritual warning for other vermin to stay away from Roman fields.<sup>9</sup>

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Notes:

<sup>1</sup> Keller (1913) Vol. 2; 173.

<sup>2</sup> For the 'privileged' position of wolves in the Roman tradition, see, for example Dinzelbacher (2000) 114.

<sup>3</sup> Toynbee (1996) 105, in particular the dog helping to capture the rhinoceros in the 'Great Hunt' mosaic from Piazza Armerina.

<sup>4</sup> Martial, *De Spectaculis*, 33.

<sup>5</sup> Martial, *Epigrams*, 11, 69.

<sup>6</sup> Dio, 61, 6; Plutarch, *De Sollertia Animalium*, 19 (973E, 974A): Toynbee (1996) 108.

<sup>7</sup> Symmachus, *Epistulae*, 2, 77: Toynbee (1996) 104.

<sup>8</sup> Ovid, *Fasti*, 4, 681-712: Toynbee (1996) 102.

<sup>9</sup> Scullard (1981) 103.

*Camels:*

The one-humped camel native to North Africa and Arabia was the variety most commonly used by the Romans, usually for the purposes of transport and warfare. Several Roman period reliefs, particularly from Palmyra, depict camel-drivers and their mounts involved in the caravan trade, while epigraphic evidence attests to the existence of *dromedarii* in Roman military units in the east, such as the *cohors I Augusta Praetoria Lusitanorum*.<sup>1</sup>

However, camels also occasionally featured in the imperial *spectacula* put on in Rome, just as they had earlier appeared in Ptolemy II's famous zoological pageant in Alexandria.<sup>2</sup> The first emperor to make use of such animals was Claudius, who staged a combat involving them in the Circus Maximus.<sup>3</sup> As Toynbee states, Dio's mention of this event does not specify whether or not any *venatores* were involved in the combat, although one wonders how exciting camels fighting solely amongst themselves would be for the spectators.<sup>4</sup> Nero took the further step of racing camel-driven chariots in the Circus on one occasion.<sup>5</sup>

Camel exhibitions subsequent to the Julio-Claudians appear to have been extremely rare. A mosaic of uncertain date from the Aventine depicts a camel rider with a lion in tow, a scene that likely was inspired by a contemporary spectacle in the capital.<sup>6</sup> The final reference to performing camels in Rome concerns Elagabalus who, like Nero, is said to have yoked four camels to a chariot for a private display in the Circus Maximus.<sup>7</sup> Rare camel performances like these may have been unpopular for a number of reasons. The populace may have found fights and displays involving camels relatively uninspiring, when compared with those of larger, more exotic, and more ferocious beasts, while Roman officials may have been reluctant to use such potentially useful animals purely for entertainment purposes.

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Notes:

<sup>1</sup> Toynbee (1996) 137-39.

<sup>2</sup> Athenaeus 5, 200F, 201A.

<sup>3</sup> Dio 60, 7, 3.

<sup>4</sup> Toynbee (1996) 139. It should be noted, however, that camel-wrestling is a popular sport in modern-day Turkey: personal communication, Dr. H. Williams, Dept. of Classical, Near Eastern and Religious Studies, University of British Columbia.

<sup>5</sup> Suetonius, *Nero*, 11, 1.

<sup>6</sup> Toynbee (1996) 139.

<sup>7</sup> SHA, *Elagabalus*, 23, 1.

*Sheep and Goats:*

Even such 'mundane' animals as sheep were occasionally employed in Roman *spectacula*, a practice for which Ptolemy II's zoological procession in Alexandria perhaps served as a precedent. 450 sheep, of the Euboean, Ethiopian, and Arabian varieties, are said to have participated in that particular spectacle.<sup>1</sup> African wild rams appeared in various spectacles at least as early as the Julio-Claudian period, and possibly even earlier. Columella records that his uncle bought some of these animals, which had been shipped to Cadiz for the local *munerarii*, for breeding purposes.<sup>2</sup> In the Republican period, wild sheep were kept by Lippinus in his *vivarium* near Tarquinium.<sup>3</sup>

Although specific references to sheep involved in *spectacula* are relatively rare, what evidence does exist suggests that wild sheep periodically participated in Roman spectacles up until the late empire. The previously-mentioned *venatio* mosaic found in Carthage depicts two such animals in addition to various other animals, such as bears and leopards. The numbers included on the bodies of many of the animals in the mosaic indicate that sixteen wild sheep in total participated in this particular event.<sup>4</sup> The early fourth century mosaic from Hippo Regius, Algeria, depicts a group of captured wild sheep, although these are likely intended as bait for the carnivorous felines in the scene rather than as arena participants themselves.<sup>5</sup> As far as imperial *venationes* are concerned, the future Gordian I is said to have included 100 wild sheep in the *venatio* he staged as aedile under Septimius Severus, while Probus included these animals in the massive *venatio* staged in the Circus Maximus some sixty years later.<sup>6</sup>

The Romans may also have been inspired by Ptolemy II's procession featuring sixty chariots drawn by goats to include such animals in their own *spectacula*, but this innovation appears to have been short-lived.<sup>7</sup> Ovid in fact complains about the display of Italian wild goats and roes in the Circus Maximus instead of Libyan



lionesses in one of the *Ludi Florales* of his day.<sup>8</sup> The only other literary reference to such animals possibly participating in a *venatio* is Martial's epigram about a roe standing on a rock while ignoring the dogs around him.<sup>9</sup> As Toynbee states, this roe was likely not involved in a public spectacle, unless it was one where landscape element such as boulders were placed on the arena floor beforehand.<sup>10</sup> No depictions of goats or roe in such a context are known from Roman art. In the case of these animals, it appears that the Romans, for novelty's sake, unsuccessfully experimented with including them in their animal spectacles without first considering their entertainment value, which must have paled beside that of larger, and more violent animals such as rhinoceroses and wild boars.<sup>11</sup>

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Notes:

<sup>1</sup> Athenaeus 5, 201B-C.

<sup>2</sup> Columella, *De Re Rustica*, 7, 2, 4-5.

<sup>3</sup> Varro, *De Re Rustica*, 3, 12, 1.

<sup>4</sup> Toynbee (1996) 30-31.

<sup>5</sup> Loisel (1912) 97; Dunbabin (1978) 55.

<sup>6</sup> *SHA*, *Gordiani Tres*, 3, 7; *Probus*, 19, 4.

<sup>7</sup> For the goats in Ptolemy II's procession see Athenaeus 5, 200F.

<sup>8</sup> Ovid, *Fasti*, 5, 371-72; Toynbee (1996) 164-65.

<sup>9</sup> Martial, *Epigrams*, 13, 98.

<sup>10</sup> Toynbee (1996) 165.

<sup>11</sup> Toynbee (1996) 164-65.

*Hares:*

As numerous pieces of Roman art attest, a favourite Roman pastime was the hunting of hares in open country. Game preserves (*leporaria*), in which hares and other animals were kept, were popular as early as the Republican period.<sup>1</sup> The Romans also made use of these innocuous animals in a few of their *spectacula*, albeit in a subsidiary role. Ovid records that hares, along with goats, were captured in the Circus Maximus during the somewhat uninspired *Ludi Florales* he witnessed.<sup>2</sup> According to Calpurnius Siculus, relatively rare white hares from the Alps were exhibited in one of Nero's spectacles.<sup>3</sup> Finally, Martial devotes several epigrams to the lions in the spectacle(s) who took hares in their mouths without harming them.<sup>4</sup>

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Notes:

<sup>1</sup> Varro, *De Re Rustica*, 3, 3, 2; 12, 1-6: Toynbee (1996) 200-01.

<sup>2</sup> Ovid, *Fasti*, 5, 371-72.

<sup>3</sup> Calpurnius Siculus, *Eclogues*, 7, 58: Toynbee (1996) 200.

<sup>4</sup> Martial, *Epigrams*, 1: 6, 14, 22, 44, 48, 51, 60, 104: Toynbee (1996) 62.

*Marine Life:*

The Romans did not limit their *spectacula* solely to terrestrial species, but also employed marine animals on occasion. Pliny states that seals could be taught to bow before the public and greet them with a bark, implying that they were periodically included in Roman displays.<sup>1</sup> Pliny's probable contemporary Calpurnius Siculus records seeing bears struggle with seals at one of Nero's shows.<sup>2</sup> In his *Life of Apollonius* the third century author Philostratos records the sight of a seal in Aegae's circus mourning for her dead offspring which had been born in captivity.<sup>3</sup> Although the work as a whole is fictional, this anecdote may reflect an actual effort in Aegae and other centres to breed seals for various displays and *venationes*. Another fictional account which may nonetheless suggest the employment of seals in Roman spectacles at an even later date is the apocryphal *Acts of Paul and Thecla*, written in the mid-fifth century AD. At one point in the amphitheatre of Antioch, the saintly Thecla is said to have thrown herself into a pool of killer(?) seals, but was saved when the seals spontaneously combusted due to divine intervention.<sup>4</sup> Although the text uses the common Greek word for seal, φώκη, to denote these animals, Brown rather curiously describes them as sharks without explaining this translation.<sup>5</sup> The only known depiction of a seal in Roman art is set in a *venatio* scene: a mosaic from Cos, amongst other animals, shows a seal named Euploia (Fair-sailing).<sup>6</sup> Keller suggests that the seals used by the Romans in their spectacles were most likely monk-seals, which are still numerous in the Adriatic and Aegean today: such animals could be easily captured while sleeping on the rocks by hunters armed with nets.<sup>7</sup>

On at least two occasions, whales participated in, or provided the inspiration for Roman *spectacula*. A whale which became stuck in the harbour of Ostia during the construction work undertaken there by Claudius provided the perfect opportunity for the emperor to organize an impromptu *venatio*, in which members of the Praetorian Guard attacked the creature with spears from their ships.<sup>8</sup> It is

even possible that more than one whale was involved in this encounter, unless Pliny has made a simple grammatical error: he initially refers to a single whale, but later mentions more than one animal being attacked by Claudius' soldiers. At a much later date, a gigantic model of a whale which had washed ashore near the mouth of the Tiber was constructed by Septimius Severus for one of his *venationes* in the Colosseum(?): fifty bears are said to have fit into its interior.<sup>9</sup>

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Notes:

<sup>1</sup> Pliny, *NH*, 9, 15.

<sup>2</sup> Calpurnius Siculus, *Eclogues*, 7, 65-66.

<sup>3</sup> Philostratos, *Vita Apollonii*, 2, 14. Unfortunately there is no remaining physical evidence for the circus at Aegae: see Humphrey (1986) 572.

<sup>4</sup> *Acts of Paul and Thecla* 34.

<sup>5</sup> Brown (1988) 1, 157-58.

<sup>6</sup> Toynbee (1996) 205.

<sup>7</sup> Keller (1913) Vol. 1; 408: For the capture of seals, see Manilius 5, 661.

<sup>8</sup> Pliny, *NH*, 9, 5.

<sup>9</sup> Dio 76, 16.

### Conclusion

Apart from providing a comprehensive overview of Roman animal *spectacula* and their development, the main aim of this dissertation has been to examine the organization and infrastructure behind such events. Although the relevant evidence is at times not particularly abundant, enough does remain to show the tremendous effort and expense that was involved in staging *venationes* and animal displays. Like gladiatorial games, the organization of animal *spectacula* was considered important enough in the imperial period to be entrusted to a variety of officials and personnel. Both civilian and military hunters were employed throughout Roman territory in capturing the large numbers of animals required for shows in Rome and throughout the empire. Once the animals had been captured, civilian and military officials were also responsible for maintaining them in enclosures until they were due to appear in the arena. A great deal of expense and effort was also involved in converting venues such as the Colosseum to hold various animal *spectacula*.

Because of the dissertation's focus on the infrastructure behind animal *spectacula*, ideological issues pertaining to these events, such as ancient attitudes towards animals, have not been discussed in any great detail. A full-scale monograph would in all probability be necessary to fully explore the social aspects of the *venationes* and animal displays. One final topic that can briefly be touched upon in this dissertation, however, is the prevailing Roman attitudes to animals, attitudes that do much to explain why the Romans, over the course of centuries, were willing to go to such great lengths to produce animal *spectacula*.

Perhaps not surprisingly, Roman attitudes towards the creatures employed in their *spectacula* were far different than current views on the rights of animals. Although modern historians may be appalled at the slaughter that occurred at the *venationes*, most ancient Romans evidently were not disturbed by such considerations, although surviving artistic and literary evidence from the Roman

world suggests that many Romans were nonetheless interested in different species of animals, particularly the more intelligent varieties.<sup>1</sup> A number of surviving poems from Vandal Africa praise the hunters of wild animals, while a poem from the Greek Anthology praises the Romans for clearing the wildlife from part of present-day Libya.<sup>2</sup>

Because of prevailing attitudes in both Roman and Greek society, most spectators would have had no qualms about seeing the slaughter of beasts in the arena. A widely held view in antiquity was that animals existed merely to serve man and therefore had no rights of their own. Combat with animals was seen as a triumph of skill over brute force, as well as a way for a person to show and improve his or her own bravery.<sup>3</sup> This view is succinctly expressed by a passage from Plutarch's *Moralia*, where the speaker Soclarus states:

...it is as good a reason as any to applaud hunting that after diverting to itself most of our natural or aquired pleasure in armed combats between human beings it affords an innocent spectacle of skill and intelligent courage pitted against witless force and violence.<sup>4</sup>

Stoic ethics, which were particularly prominent during the reign of Nero, may have contributed to the popularity of the *venationes* and other *munera*. Stoics emphasized the gap in reasoning ability between men and animals, as well as the premise that even within mankind, only a few individuals were truly rational. Those following this philosophy could therefore attend the games with a clear conscience and reassure themselves of their superiority to the 'unreasoning brutes' they saw killed before them, be they man or beast.<sup>5</sup>

Animal *spectacula* in general, and *venationes* in particular, were seen as a way to symbolize and assert Roman control over the potentially hazardous natural world.<sup>6</sup> Force was considered by Greeks and Romans to be the proper method to deal with dangerous non-reasoning animals like, for example, bears and lions, although on occasion animals such as elephants were 'dominated' by being forced to perform tricks for their masters in public rather than being killed.<sup>7</sup> Even the killing of

seemingly harmless animals like deer at the *venationes* could be justified, since they were a potential threat to crops in the predominantly agrarian Roman world.<sup>8</sup>

Because of the typical attitudes towards animals in antiquity, it is not surprising that relatively few Romans seriously criticized the slaughter of beasts at the *venationes*. Seneca on more than one occasion criticizes the games, but only because the killing of men and animals did not occur in the perfect society of the 'Golden Age'.<sup>9</sup> The killing of elephants at Pompey's spectacle in 55 BC is one of the few recorded instances of public disapproval at the killing of animals in the arena.<sup>10</sup> However, as Coleman points out, it was not cruelty to animals *per se* which the audience objected to, but only that these particular animals appeared to have a certain kinship with humans, and were given a less than 'sporting' chance at survival.<sup>11</sup> In addition, although Cicero's famous letter to Marius about this event is quite often taken as evidence of the former's 'enlightened' morality, in reality Cicero may have criticized Pompey's show merely to make his friend Marius feel better about missing this particular spectacle.<sup>12</sup>

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Notes:

<sup>1</sup> Toynbee (1996) 21.

<sup>2</sup> Wiedemann (1995a) 64-65: For poems praising hunting in the Roman world see e.g. *Latin Anthology*, 186.7; *Greek Anthology*, 7, 626; cf. Strabo, 2, 5, 33.

<sup>3</sup> Most (1992) 403: For some ancient views on animals see e.g. Aristotle, *Politica*, 1, 8, 1256b15-22; Cicero, *De Natura Deorum*, 2, 14, 37; Porphyry, *De Abstinencia*, 3, 20; Origen, *Contra Celsam*, 4, 75, 78.

<sup>4</sup> Plutarch, *De Sollertia Animalium*, 959C: Cherniss (1957) 321: Robert (1971) 329.

<sup>5</sup> Most (1992) 404-05: cf. Coleman (1996) 66-67.

<sup>6</sup> Although modern man is more of a danger to wild animals than vice versa, the latter can still endanger both lives and livelihood, as in the ancient world. A recent example is the death of eight villagers in Sri Lanka caused by a group of rogue male elephants trespassing onto their tea plantation: *Toronto Star*, May 9, 1998, p. E6. Lafaye notes that in 1911, wild animals in India killed almost 2400 humans and 100,000 head of cattle: see Lafaye (1963) 702, n. 16.

<sup>7</sup> Wiedemann (1995a) 62-63, n. 21, 65-66.

<sup>8</sup> Wiedemann (1995a) 64-65: for a brief sample of ancient and modern 'animal threats', see Bomgardner (1992) 163-64.

<sup>9</sup> Seneca, *Epistulae Morales*, 90, 45; 95, 33; 7, 2: Wiedemann (1995a) 139.

<sup>10</sup> Dio, 39, 38, 2-4: Seneca, *De Brevitate Vitae*, 13, 6: Pliny, *NH*, 8, 7 (20-21): Toynbee (1996) 22-23: Beacham (1999) 64-65. Shelton [(1999) 267-68] suggests that the disapproval may have been orchestrated by Pompey's senatorial opponents in the audience.

<sup>11</sup> Cicero, *Ad Fam.*, 7, 1: Coleman (1998) 72, 74.

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<sup>12</sup> Cicero, *Ad Fam.*, 7, 1: Wiedemann (1995a) 139-40: for a contrary opinion about Cicero's letter to Marius, see Shelton (1999) 250-54.



Illustrations

Fig. 1. Tomb of the Augurs: Futrell (1997), Page. 16, Figs. 3-4.

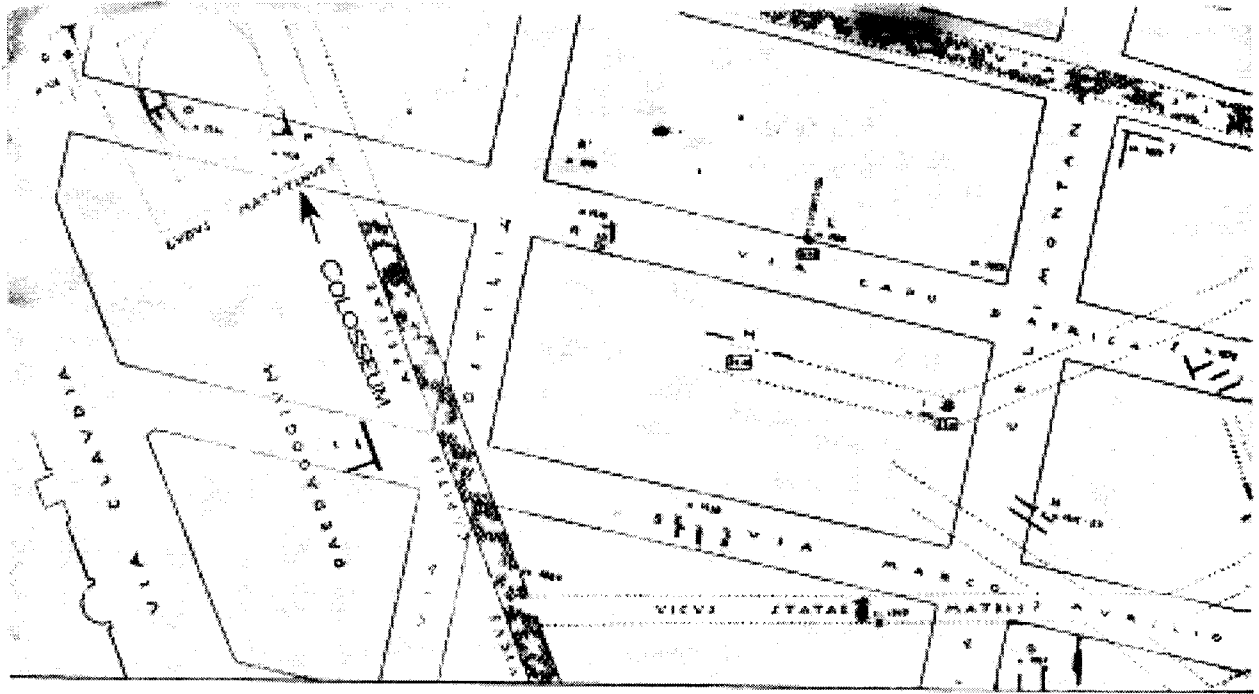


Fig. 2. Plan of Ludus Matutinus and Area: Colini (1944), Plate 16.

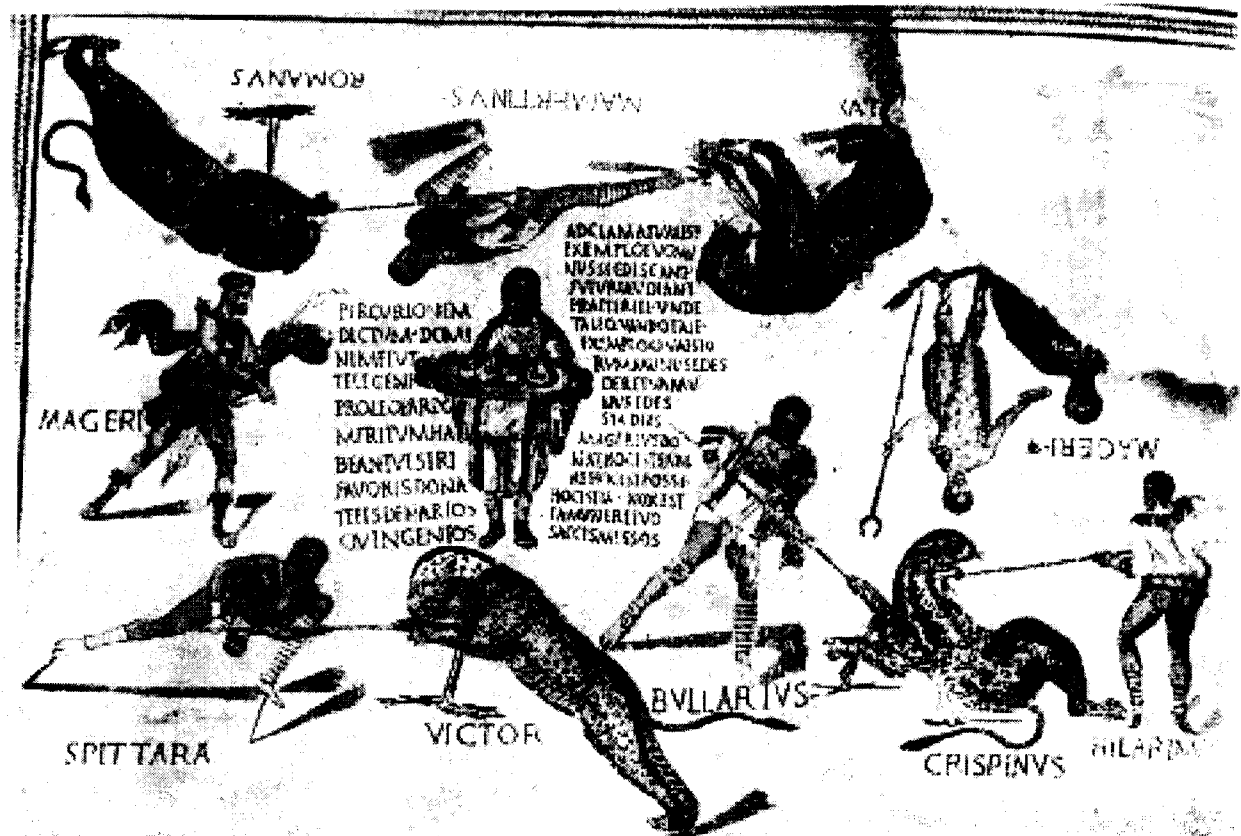


Fig. 3. Magerius mosaic: Dunbabin (1978), Plate 22, no. 53.

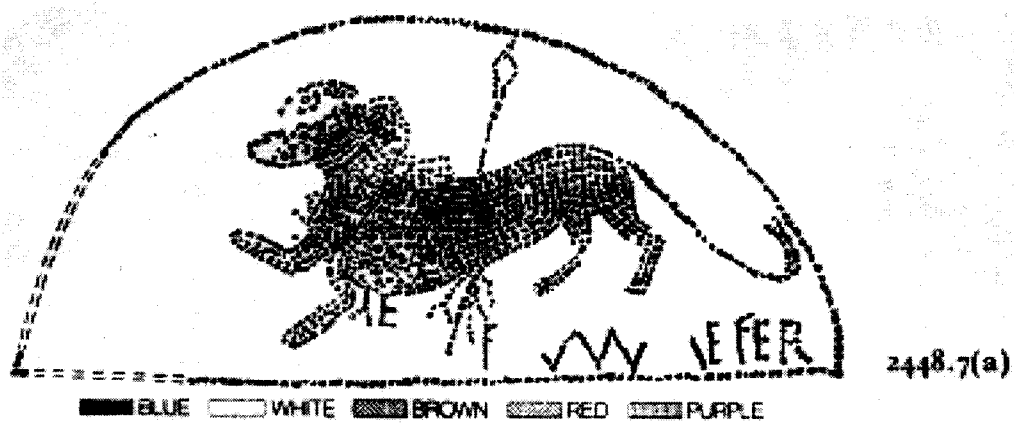


Fig. 4. Rudston mosaic: RIB II(4) (1992), Page 87.

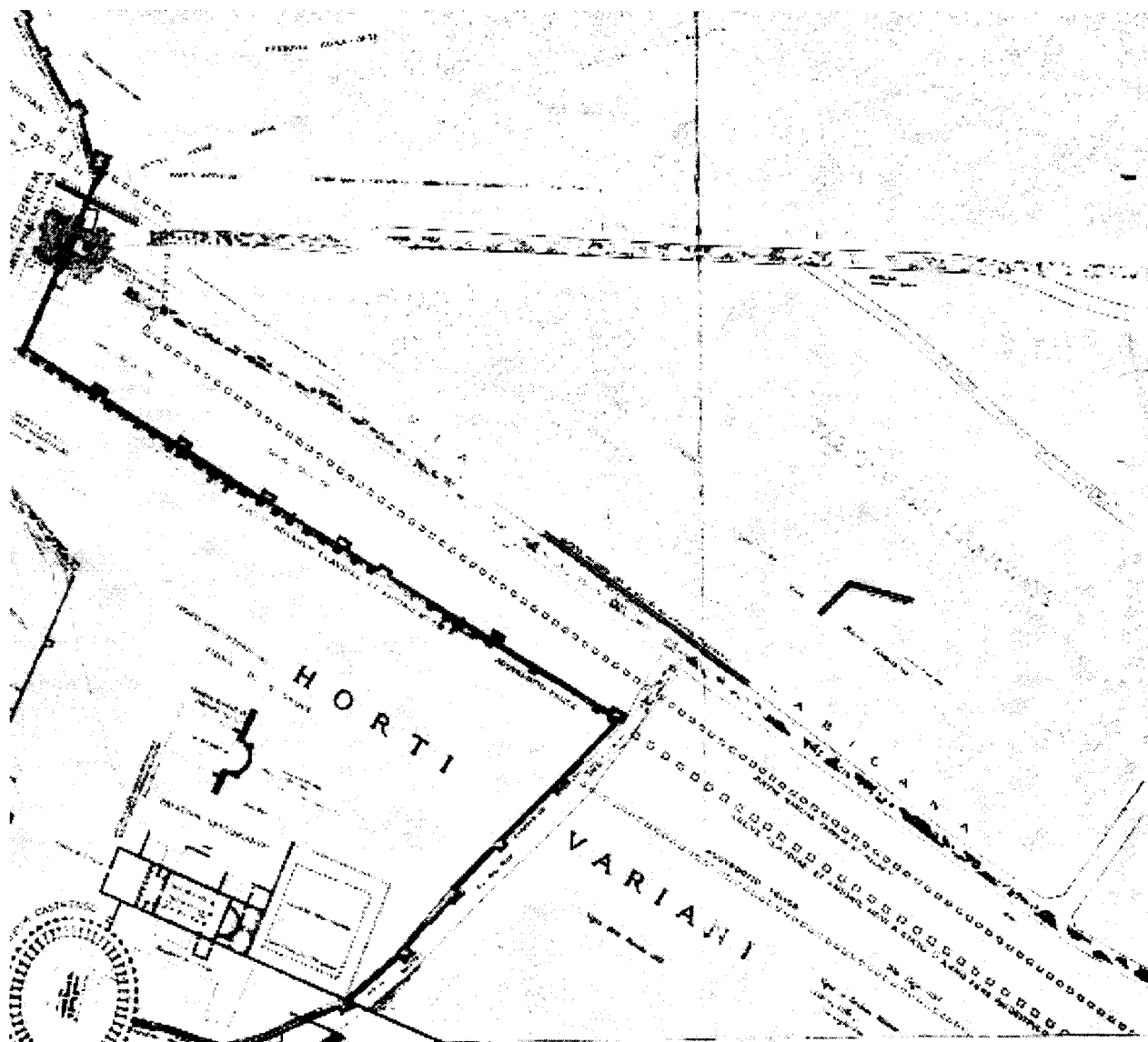


Fig. 5. Vivarium location near Porta Praenestina: Lanciani (1990b), Plate 32.

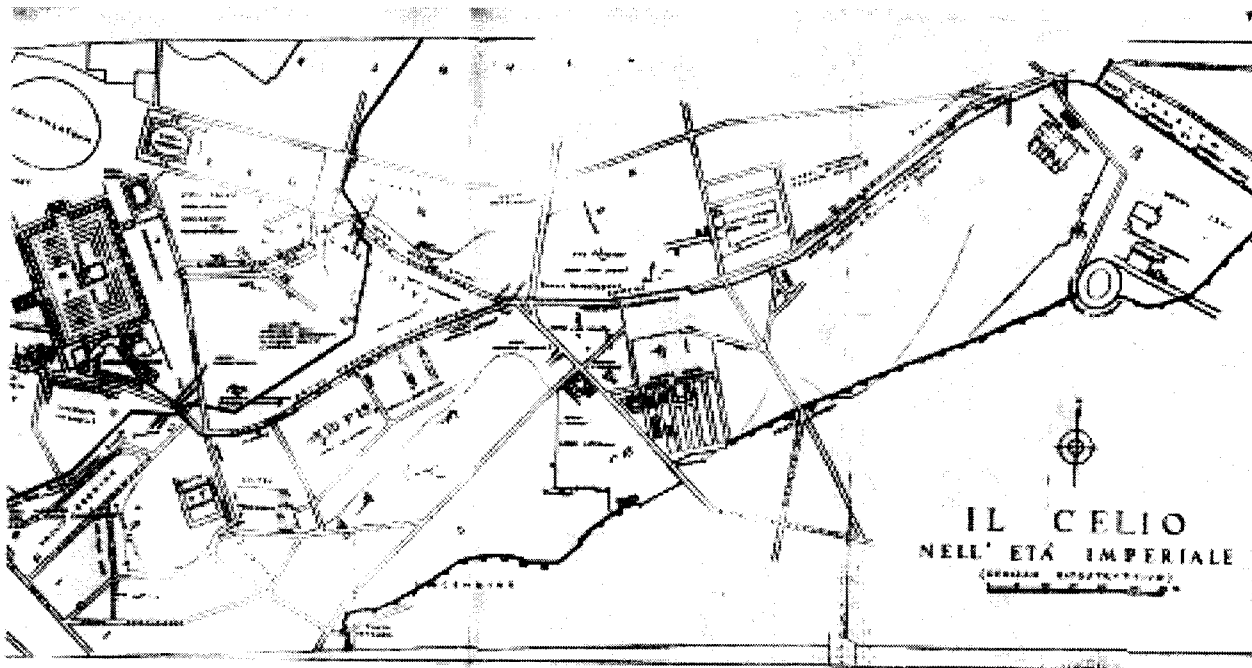


Fig. 6. Route from Vivarium to Colosseum: Colini (1944), Plate 24.



Fig. 7. Copy of Vivarium wall-painting: Lanciani (1990a), Page 277.

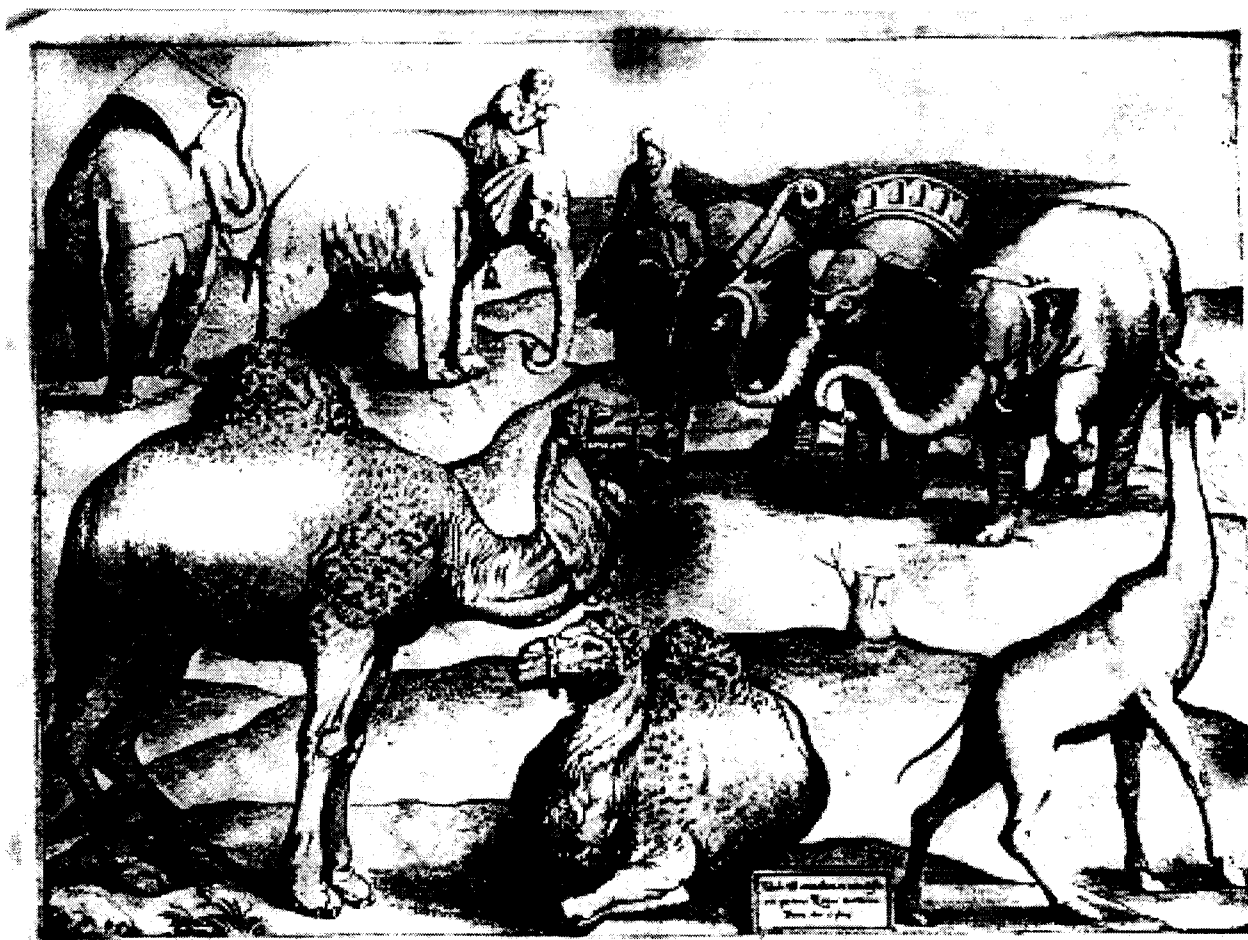


Fig. 8. Copy of Vivarium wall-painting: Lanciani (1990a) Page 277.

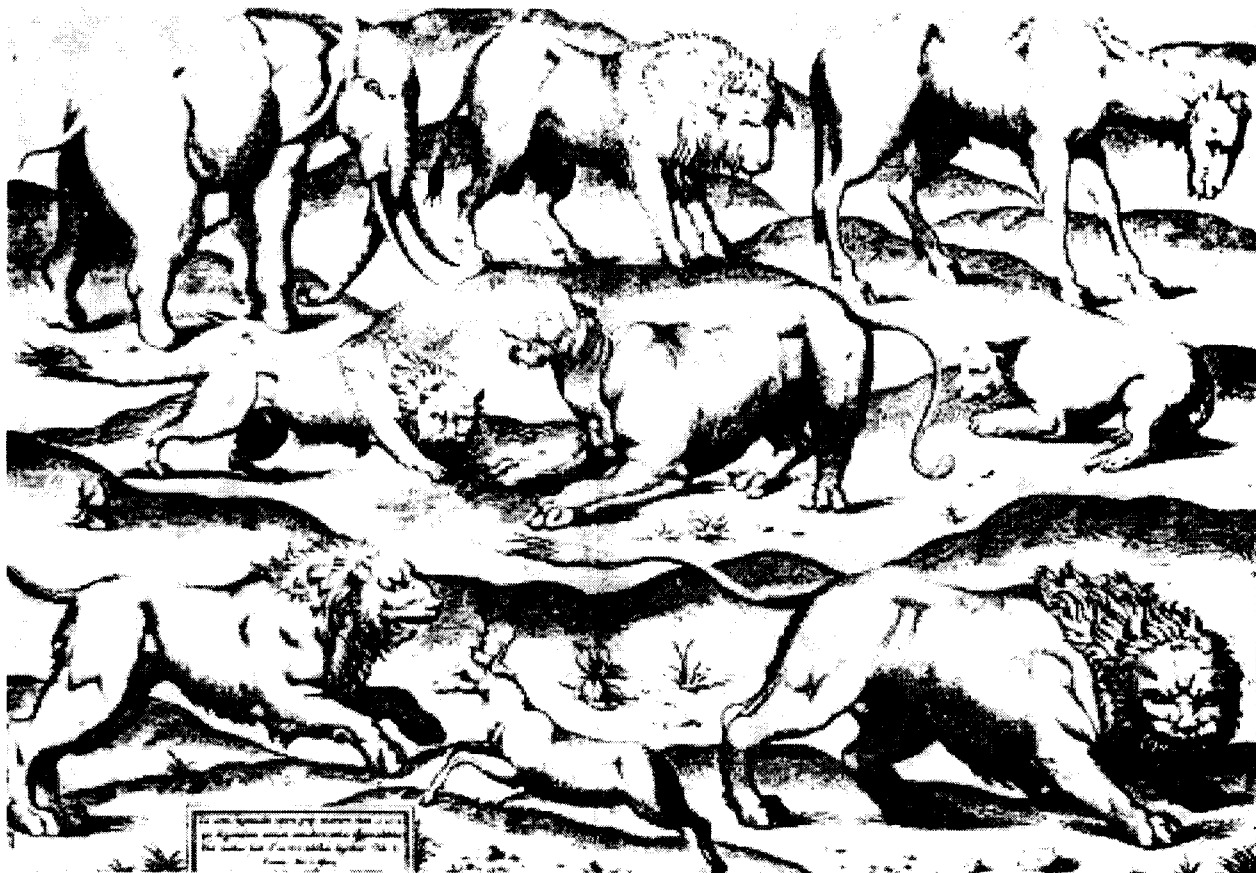


Fig. 9. Copy of Vivarium wall-painting: Lanciani (1990a), Page 277.



Fig. 10. Praetorian vivarium: Lanciani (1990b), Plate 11.



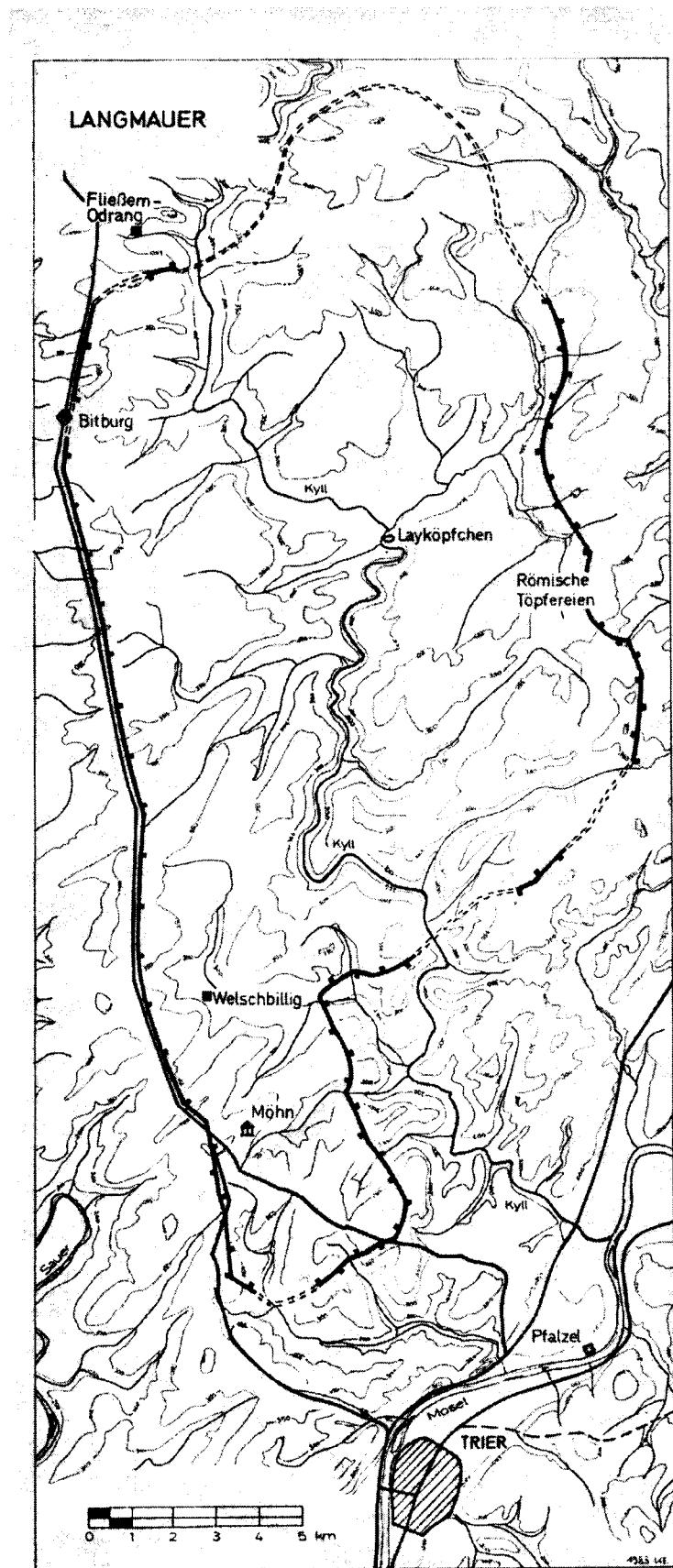


Fig. 11. Enclosure near Trier: Cüppers (1984), Page 289.



Fig. 12. She-ass mosaic: Photograph courtesy of Dr. H. Williams.



Fig. 13. Zliten mosaic: Dunbabin (1978), Plate 20.



Fig. 14. Mosaic from El Djem: Dunbabin (1978), Plate 21, nos. 50-51.

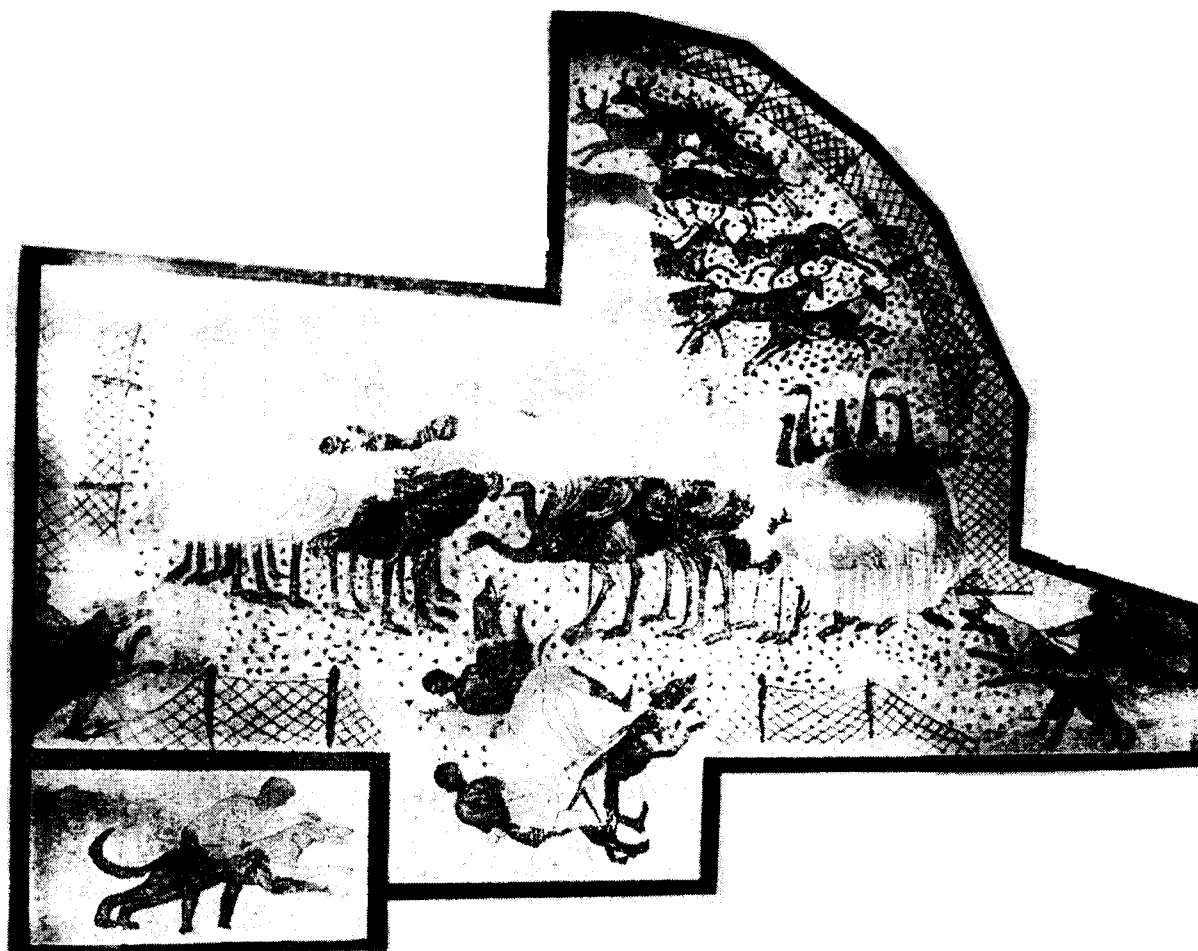


Fig. 15. Le Kef mosaic: Dunbabin (1978), Plate 22, no. 54.



Fig. 16. Detail of Radez mosaic: Toynbee (1996), Figure 34.



Fig. 17. Carthage mosaic: Dunbabin (1978), Plate 24, no. 57.



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Fig. 18. Diptych of Anastasius: Volbach (1976), Plate 8, nos. 17-18.



Fig. 19. Apri relief: Robert (1971), Plate 24, no. 27.



Fig. 20. Ephesus relief: Robert (1950), Plate 26, no. 2.



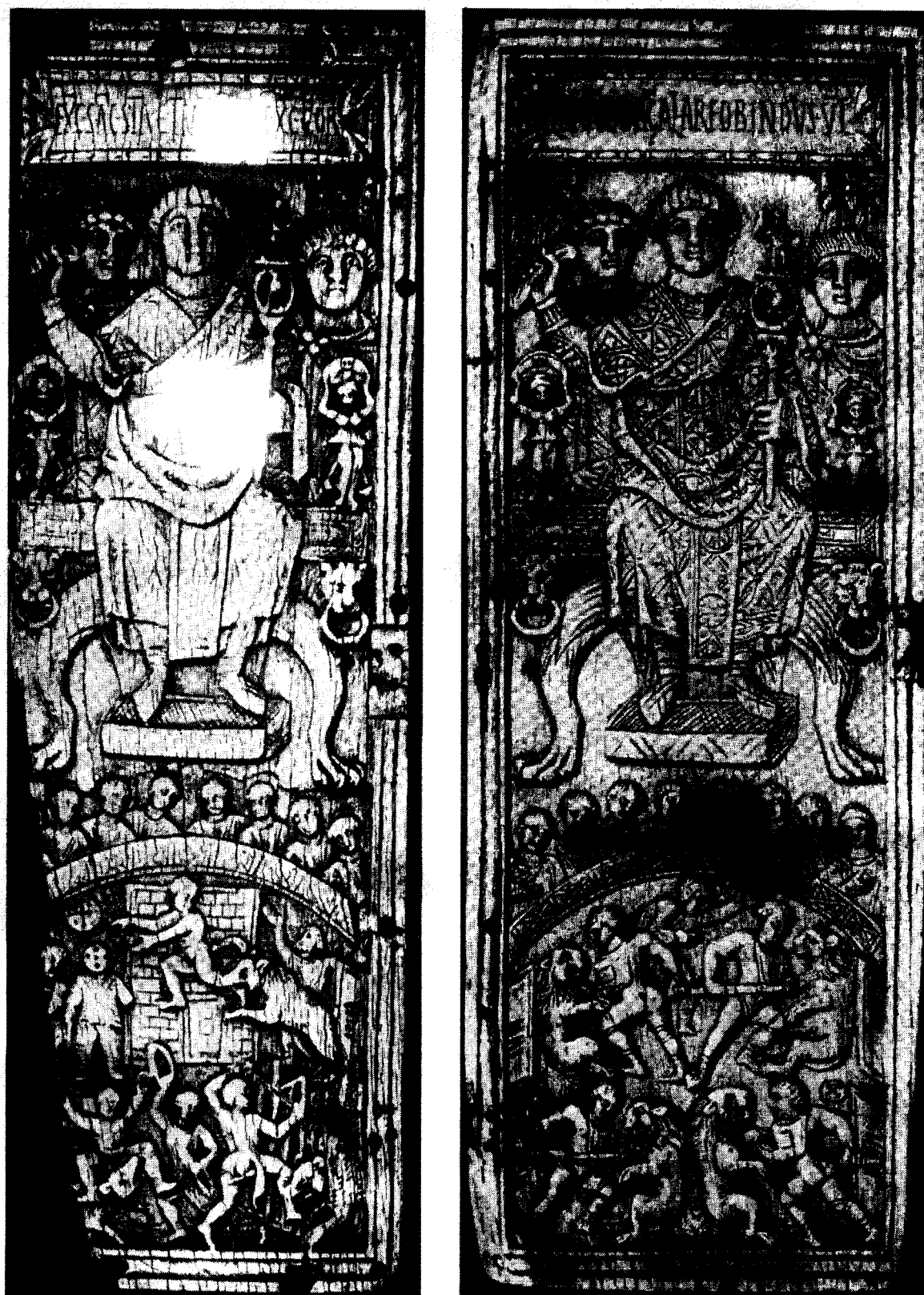


Fig. 21. Areobindus diptych: Volbach (1976), Plate 4, no. 8.

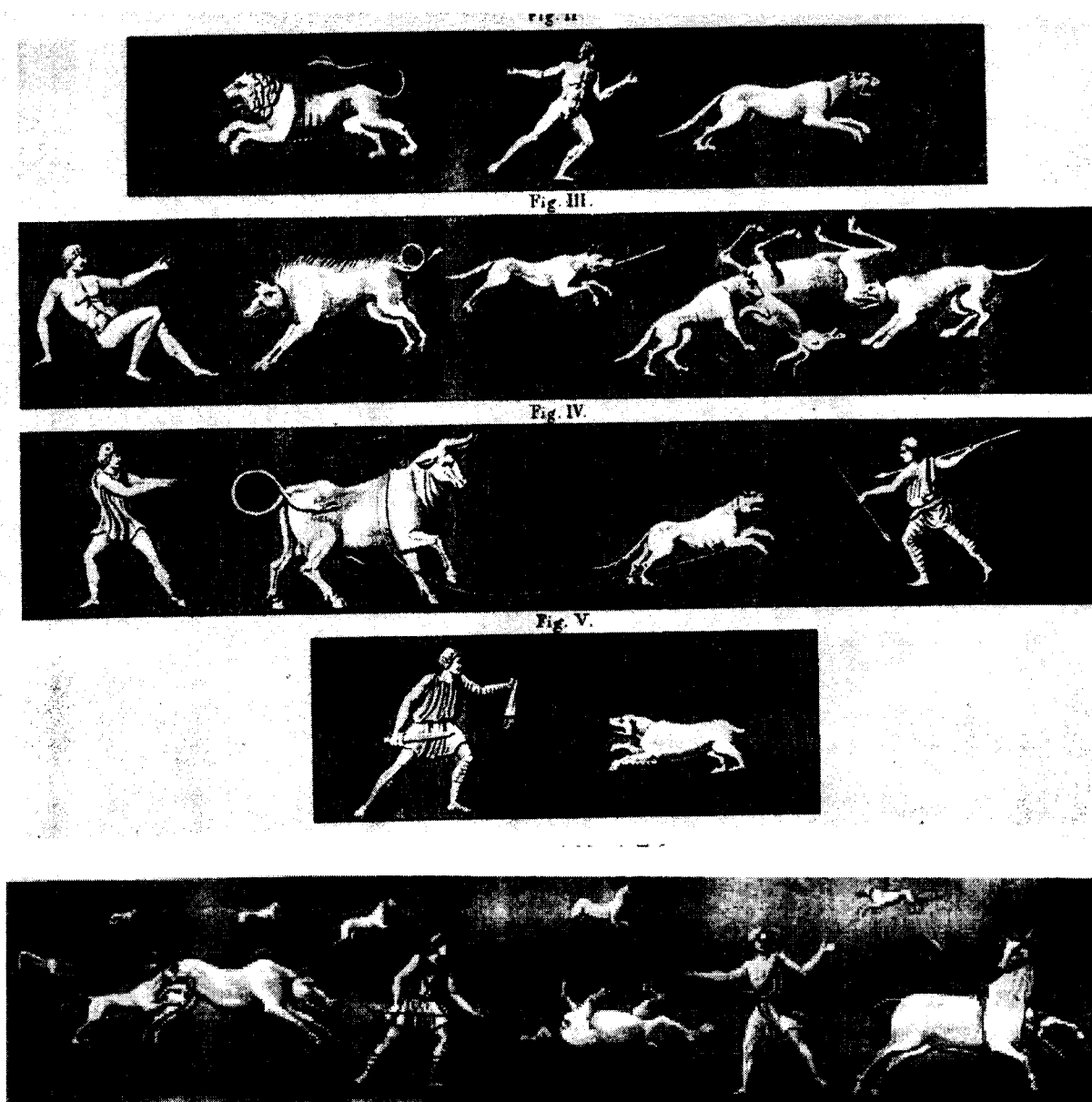


Fig. 22. Tomb of Ampliatus(?), Pompeii: Kockel (1983), Plates 19-20.



Fig. 23. Narbonne relief: Jennison (1937), facing Page 167.

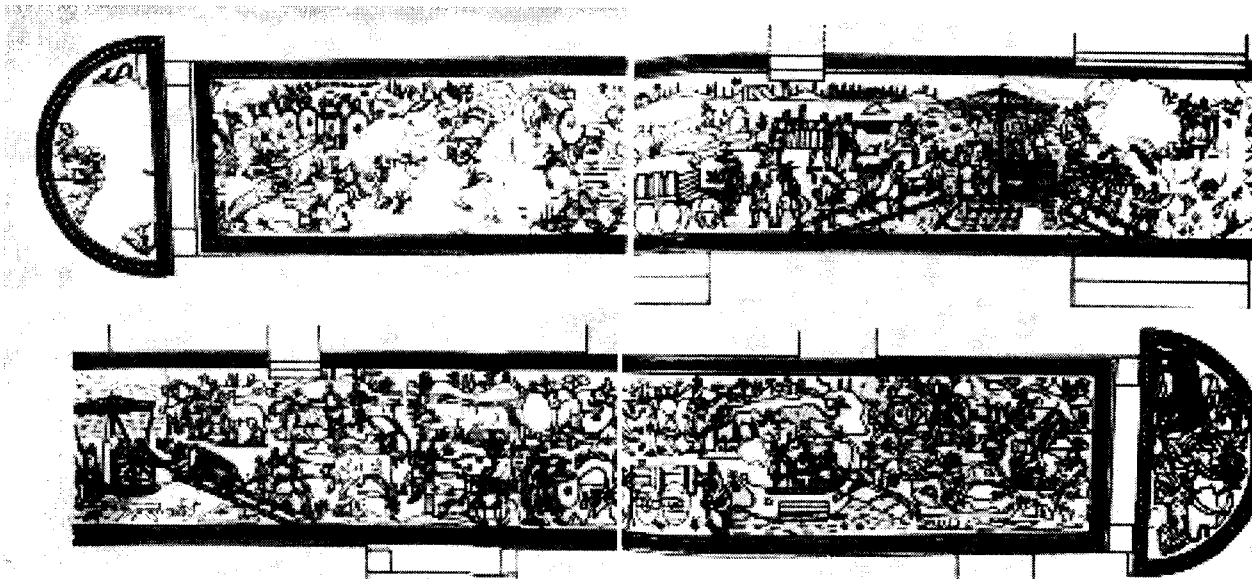


Fig. 24. Great Hunt mosaic from Piazza Armerina: Toynbee (1996), Figure 1.



Fig. 25. Elephant ear from Piazza Armerina: Settis (1982), Page 532.

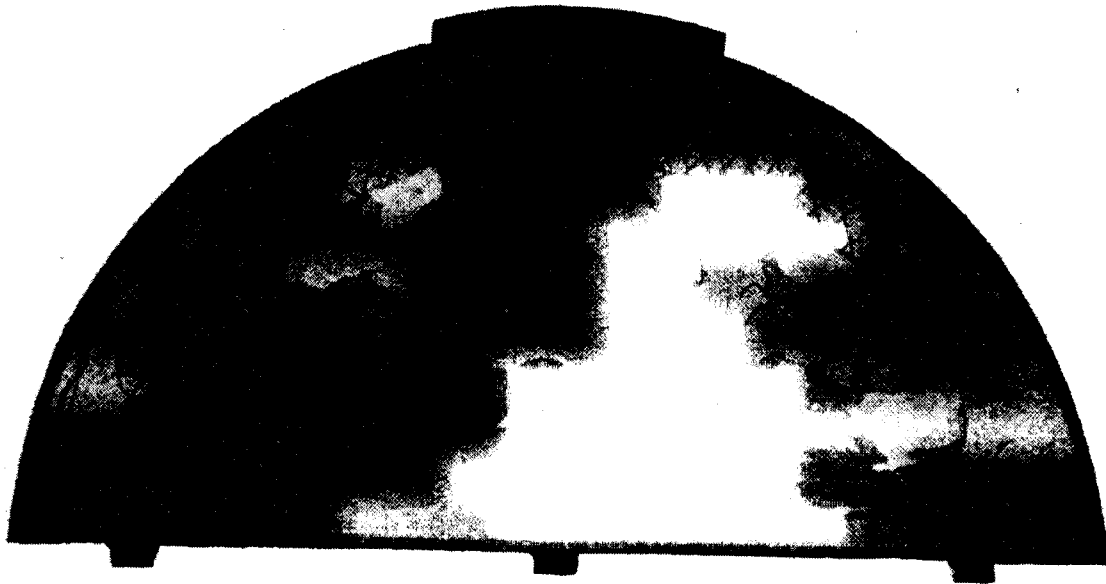


Fig. 26. 'Water-trap' mosaic from Utica: Jennison (1937), Page 9.



Fig. 27. Carthage-Dermech mosaic: Dunbabin (1978), Plate 13, no. 26.



Fig. 28. Esquiline mosaic: Dunbabin (1978), Plate 79, no. 204.



Fig. 29. Mosaic from Hippo Regius: Dunbabin (1978), Plate 14, no. 29.

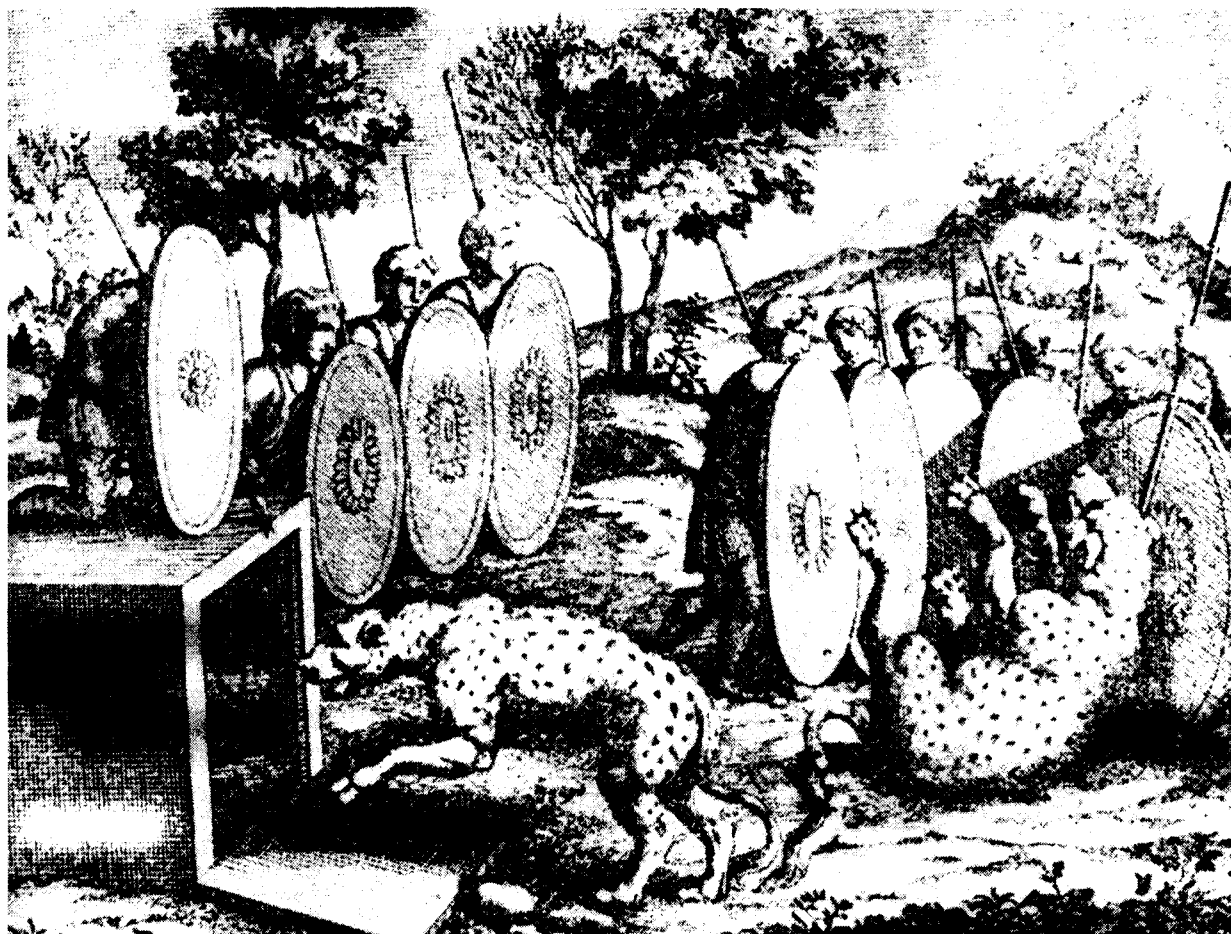


Fig. 30. Copy of wall-painting from tomb of the Nasonii: Jennison (1937), Page 187.



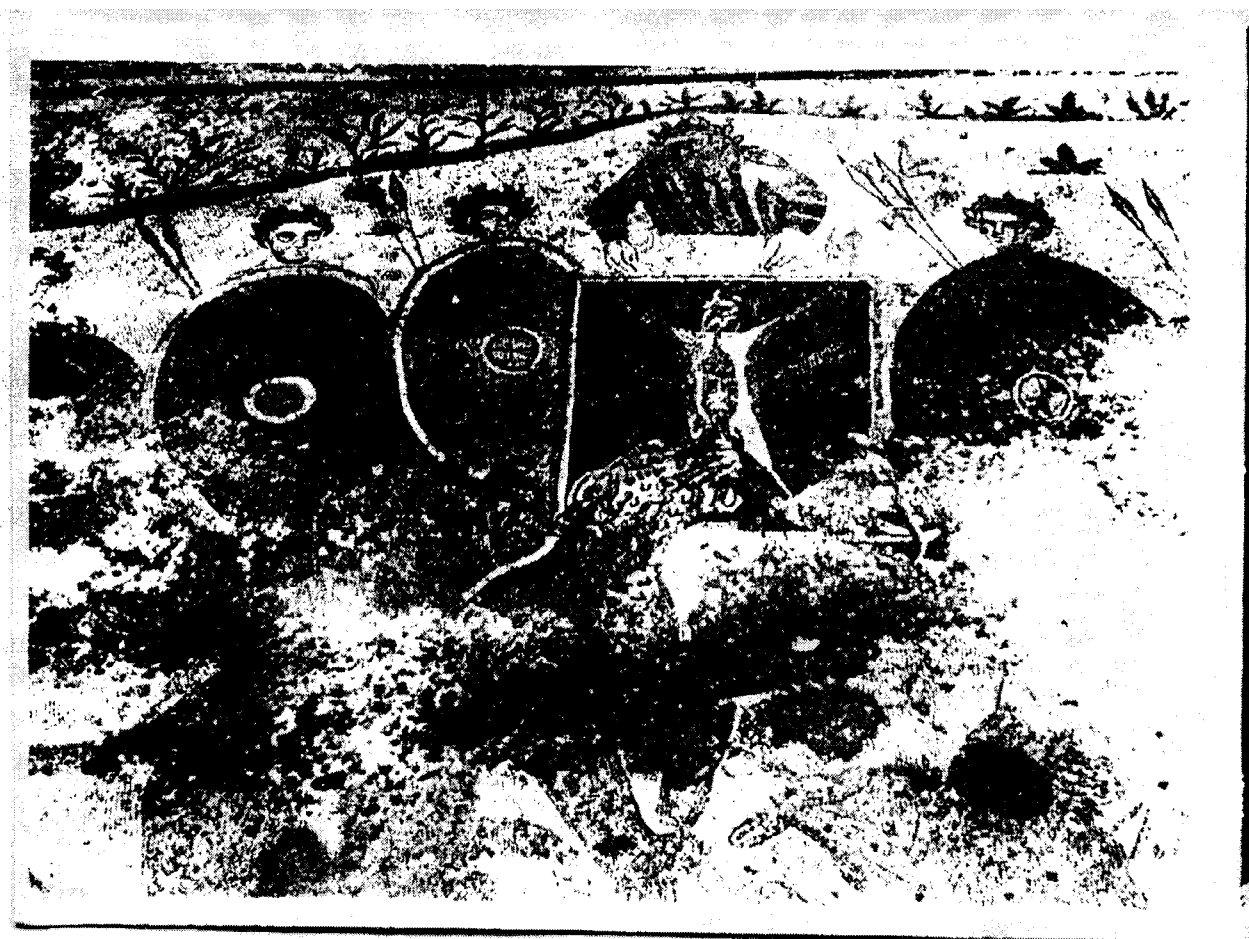


Fig. 31. Leopard capture from Great Hunt mosaic: Daltrop (1969), Plate 14.

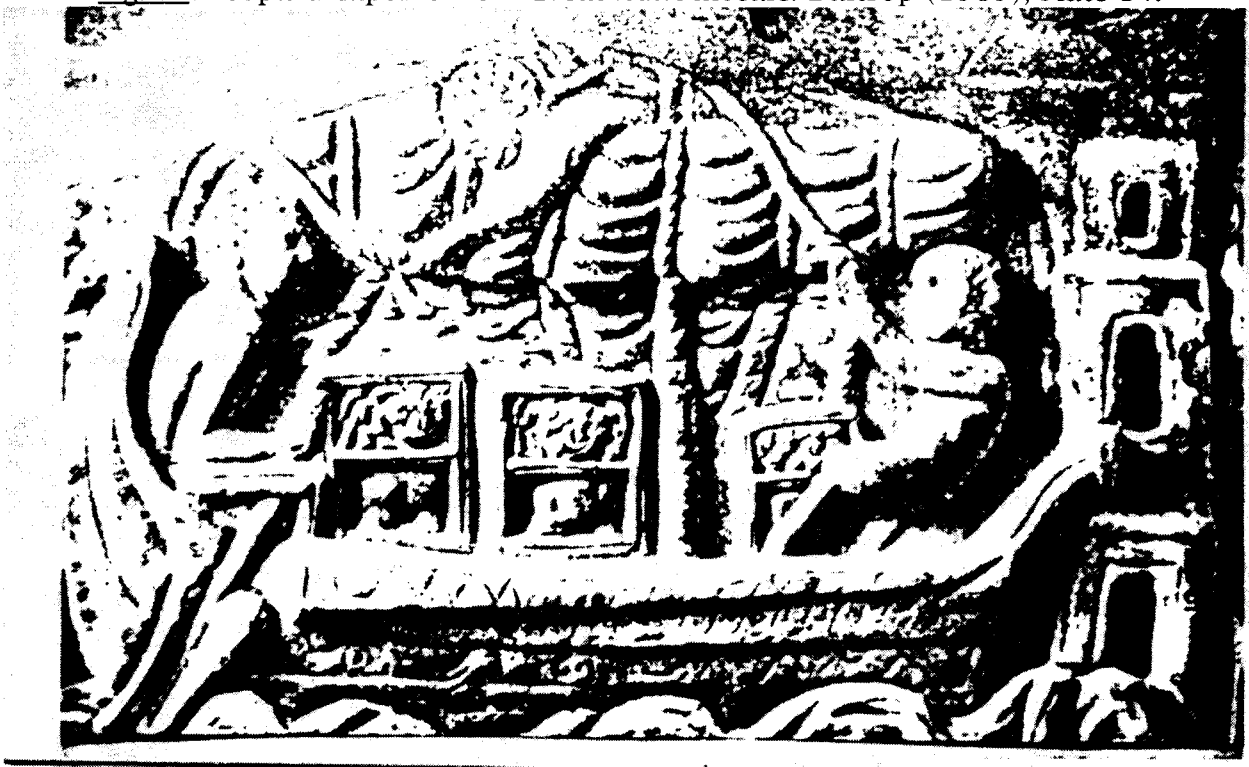


Fig. 32. Villa Medici sarcophagus: Bertrand (1987), Figure 6.

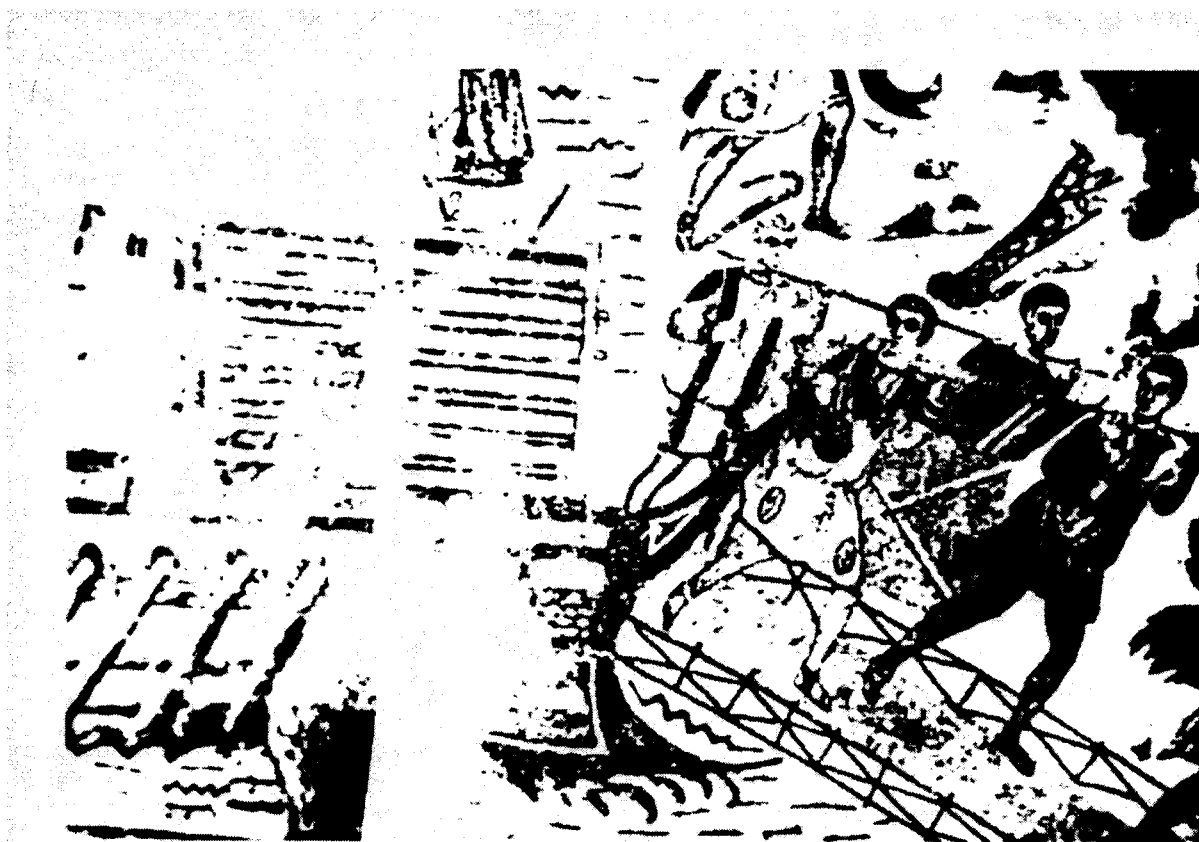


Fig. 33. Ship cages on Great Hunt mosaic, Piazza Armerina: Bertrand (1987), Figure 9.

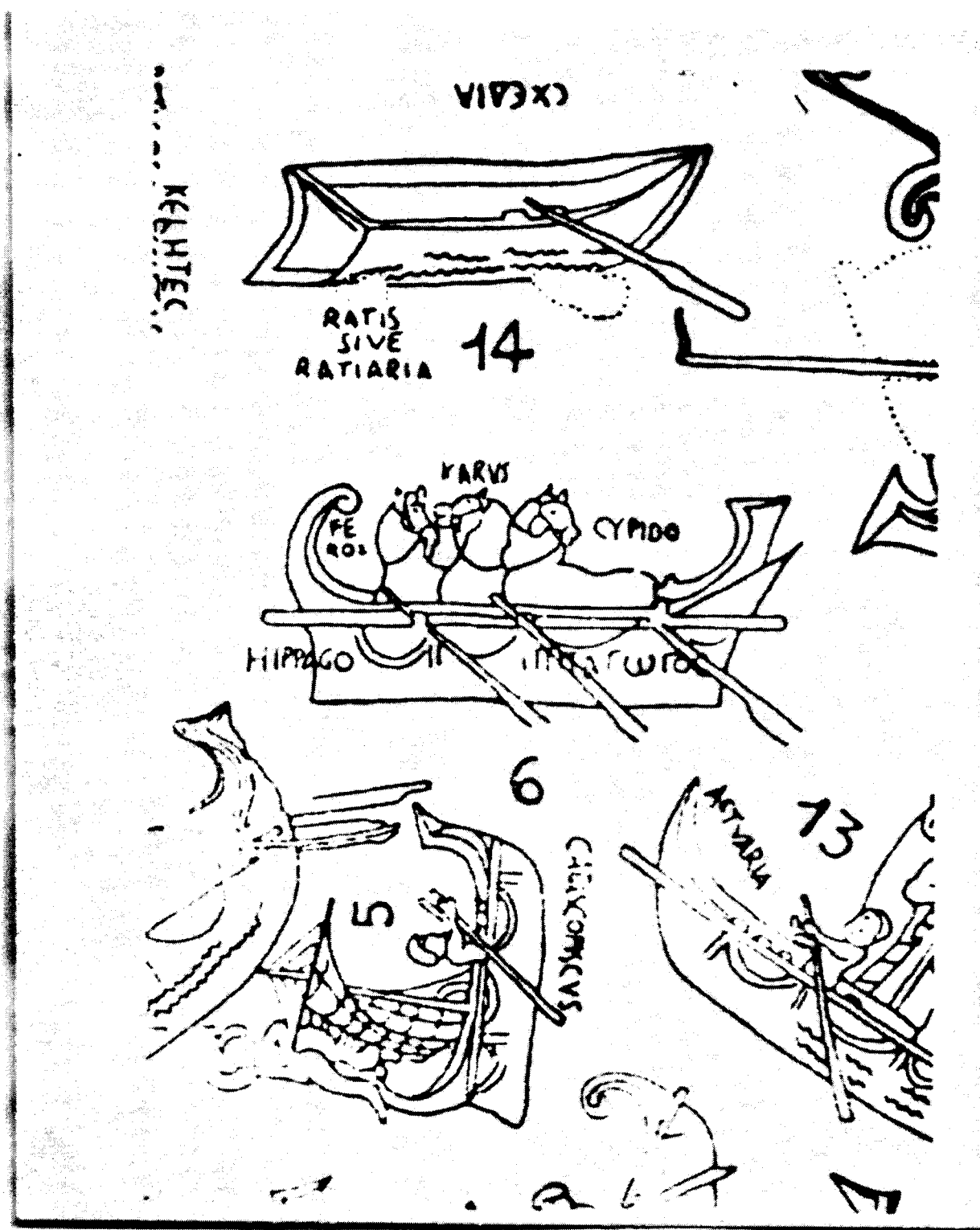


Fig. 34. Althiburos mosaic: Bertrand (1987), Figure 13.

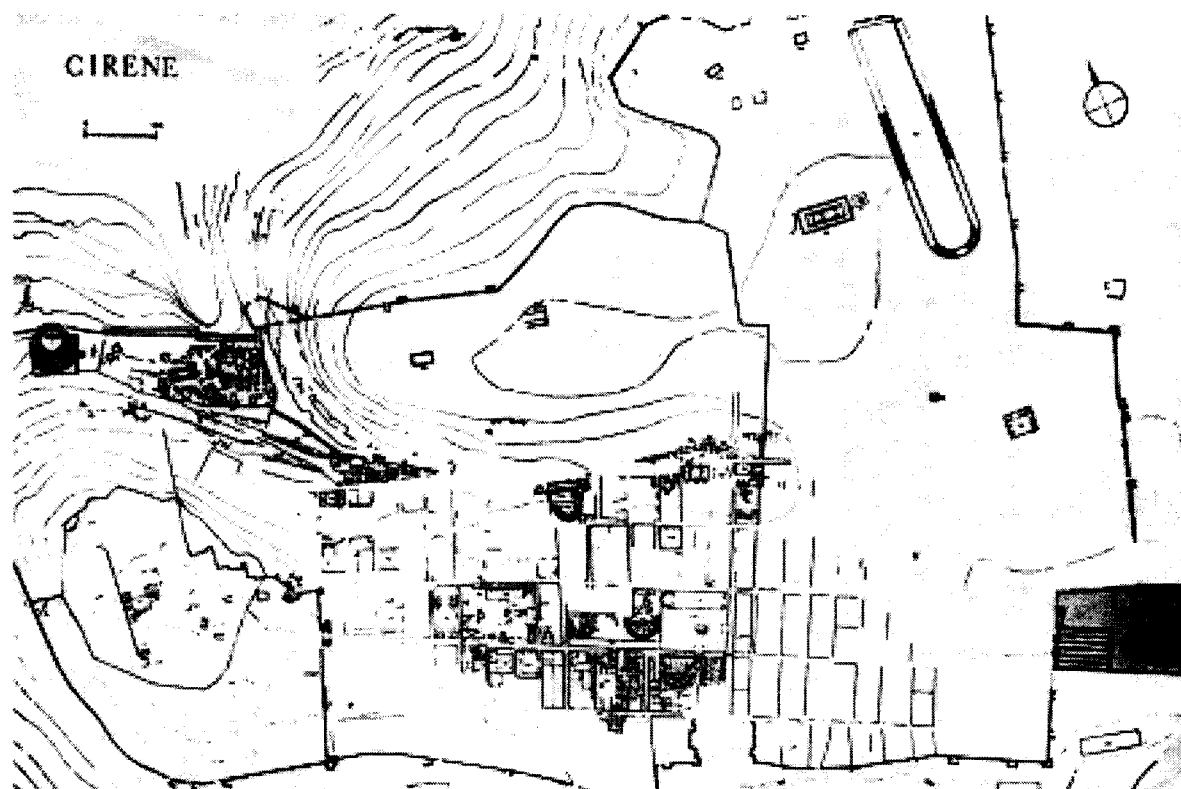


Fig. 35. Enclosure (C) at Cyrene: Luni (1979), Page 49, fig. 1.



Fig. 36. Mosaic from Square of the Corporations, Ostia: Becatti (1953), Plate 93, fig. 109.



Fig. 37. Veii mosaic: Baratte (1970), Page 795, figs. 6-7.



Fig. 38. Relief from Miletus: Monteagudo (1991), Page 261, fig. 15.

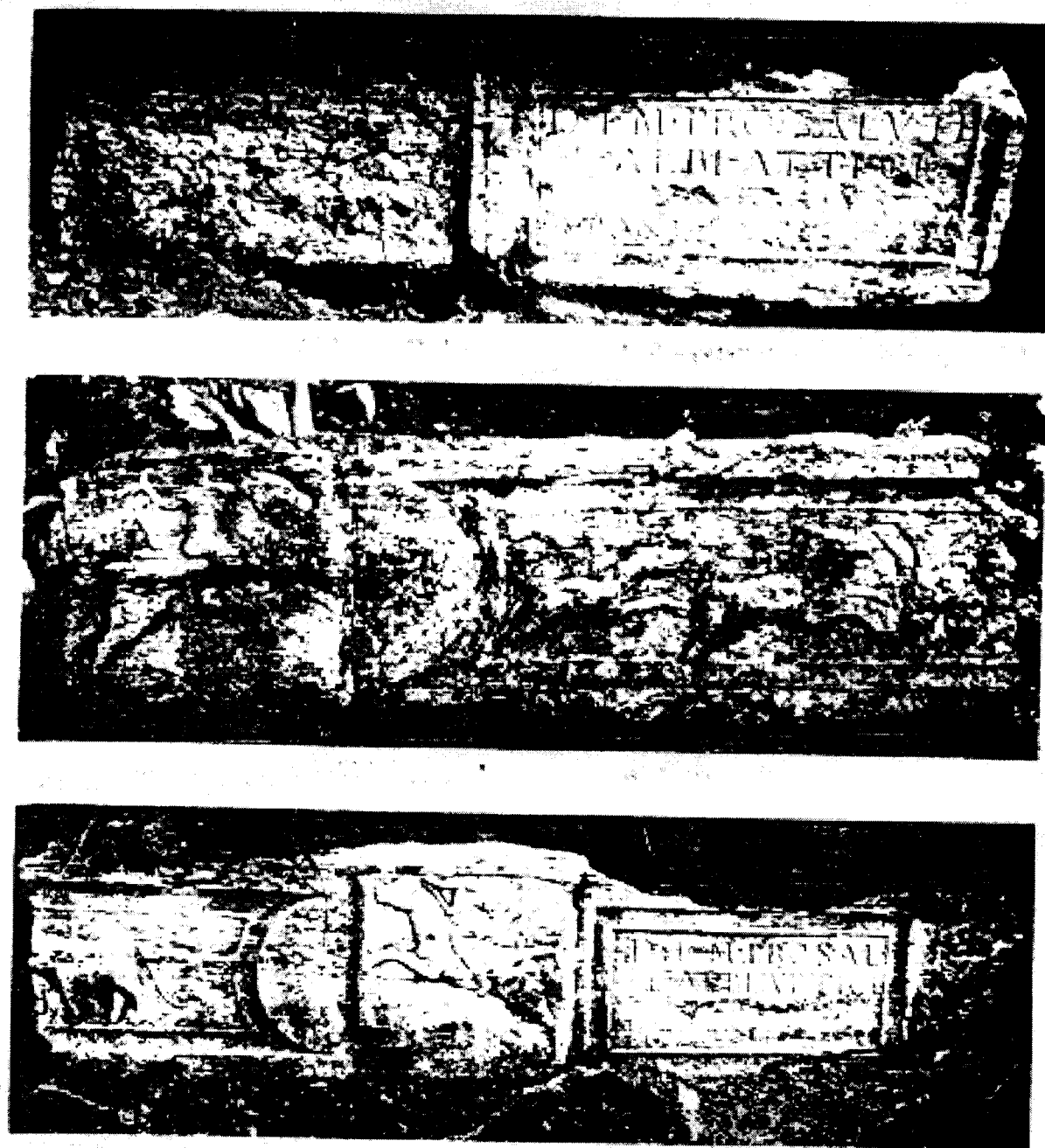


Fig. 39. Salzburg mithraeum relief: Egger (1966), Figures 1-3.



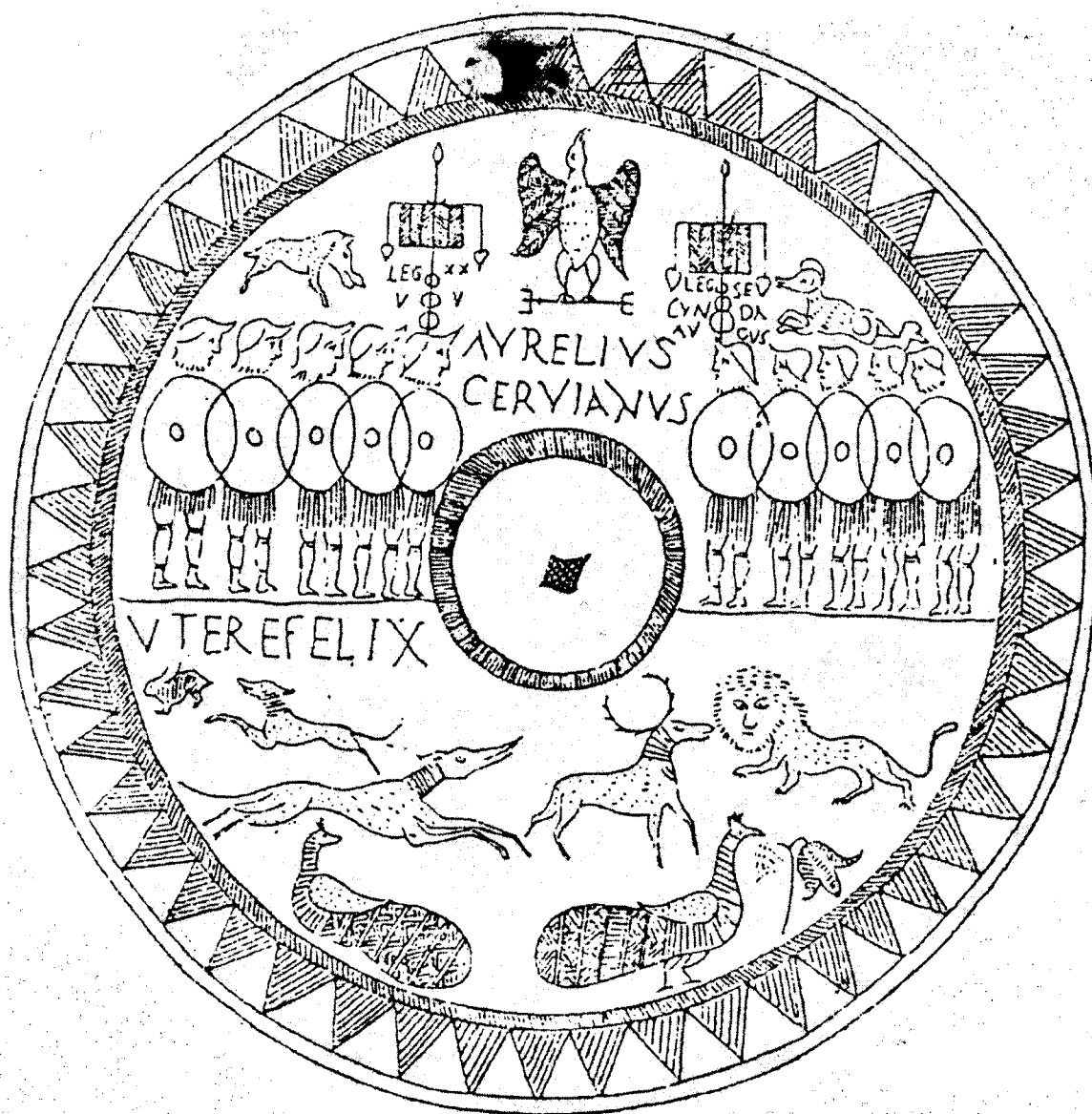


Fig. 40. Shield roundel from Roman Britain: RIB II(3) (1993), Page 56.



Fig. 41. Dura-Europos graffito: Rostovtzeff (1952), Page 67.

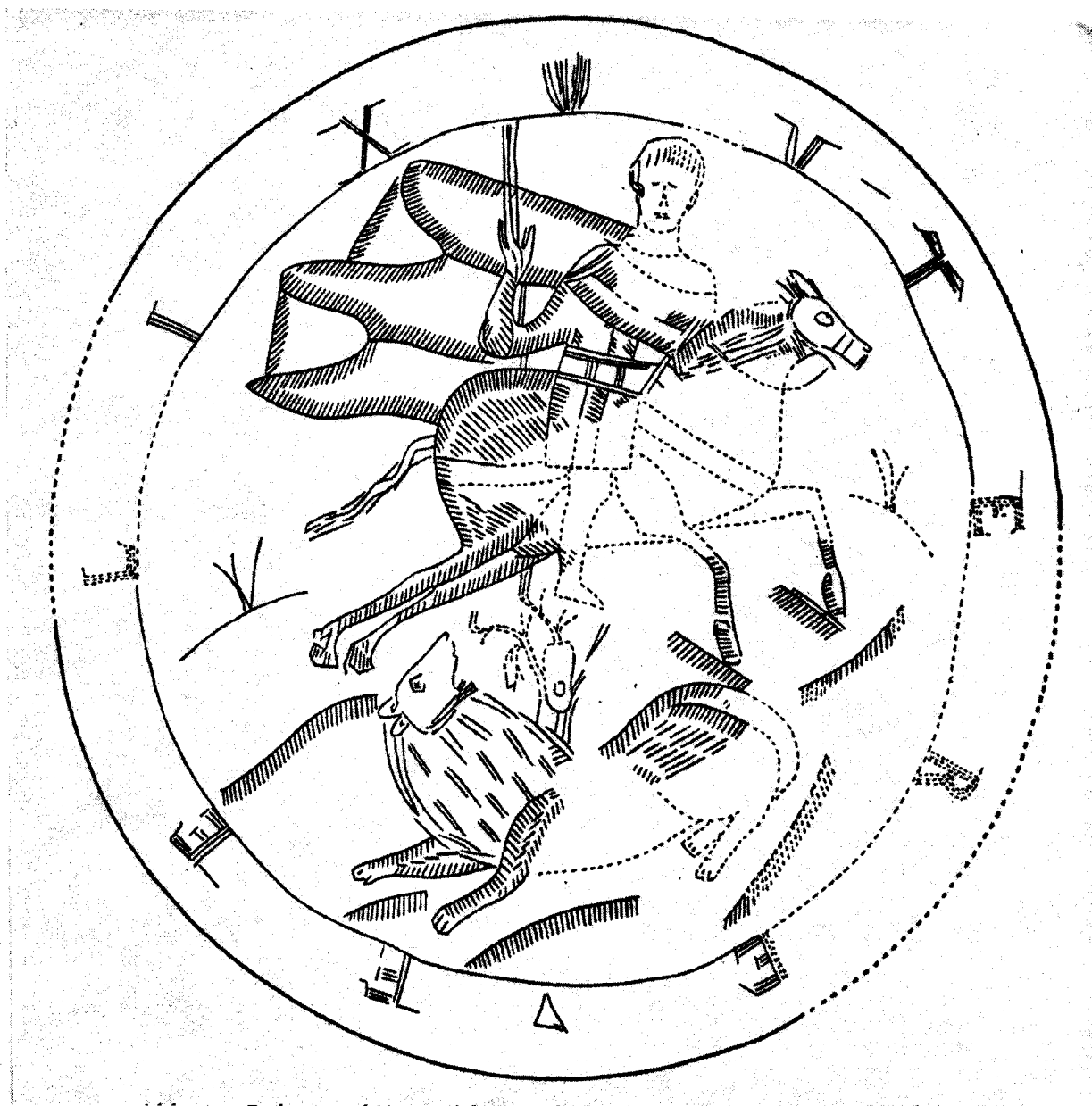


Fig. 42. Glass dish from Cologne: Kleeman (1963), Page 201.

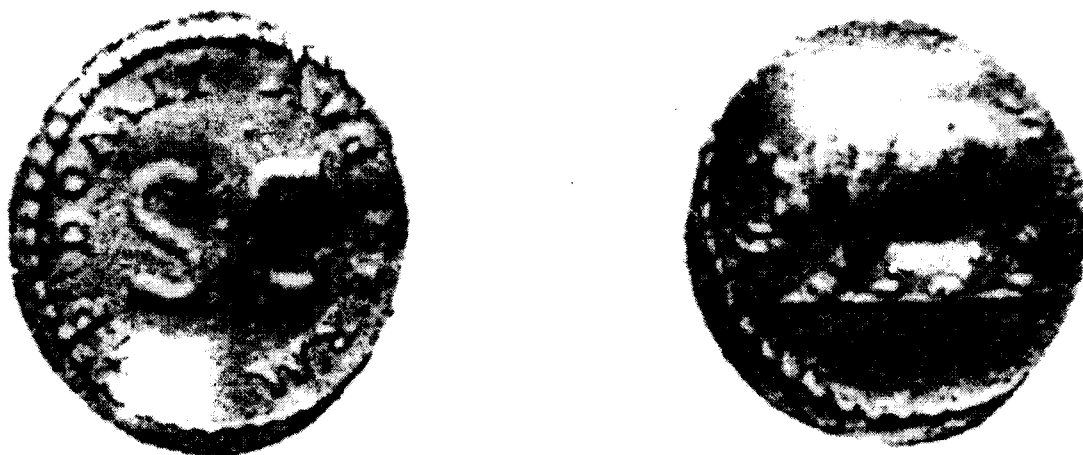


Fig. 43. Rhinoceros coin of Domitian: Howgego (1995), Number 125.

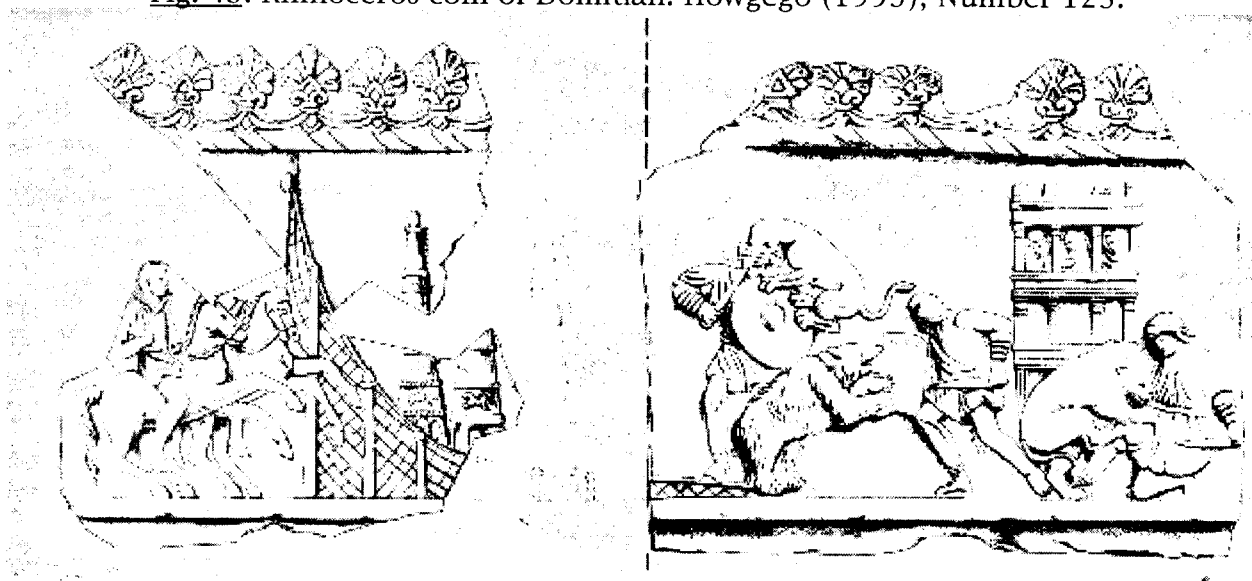


Fig. 44. Campanian terracotta plaques: Tortorella (1981), Figure 41.

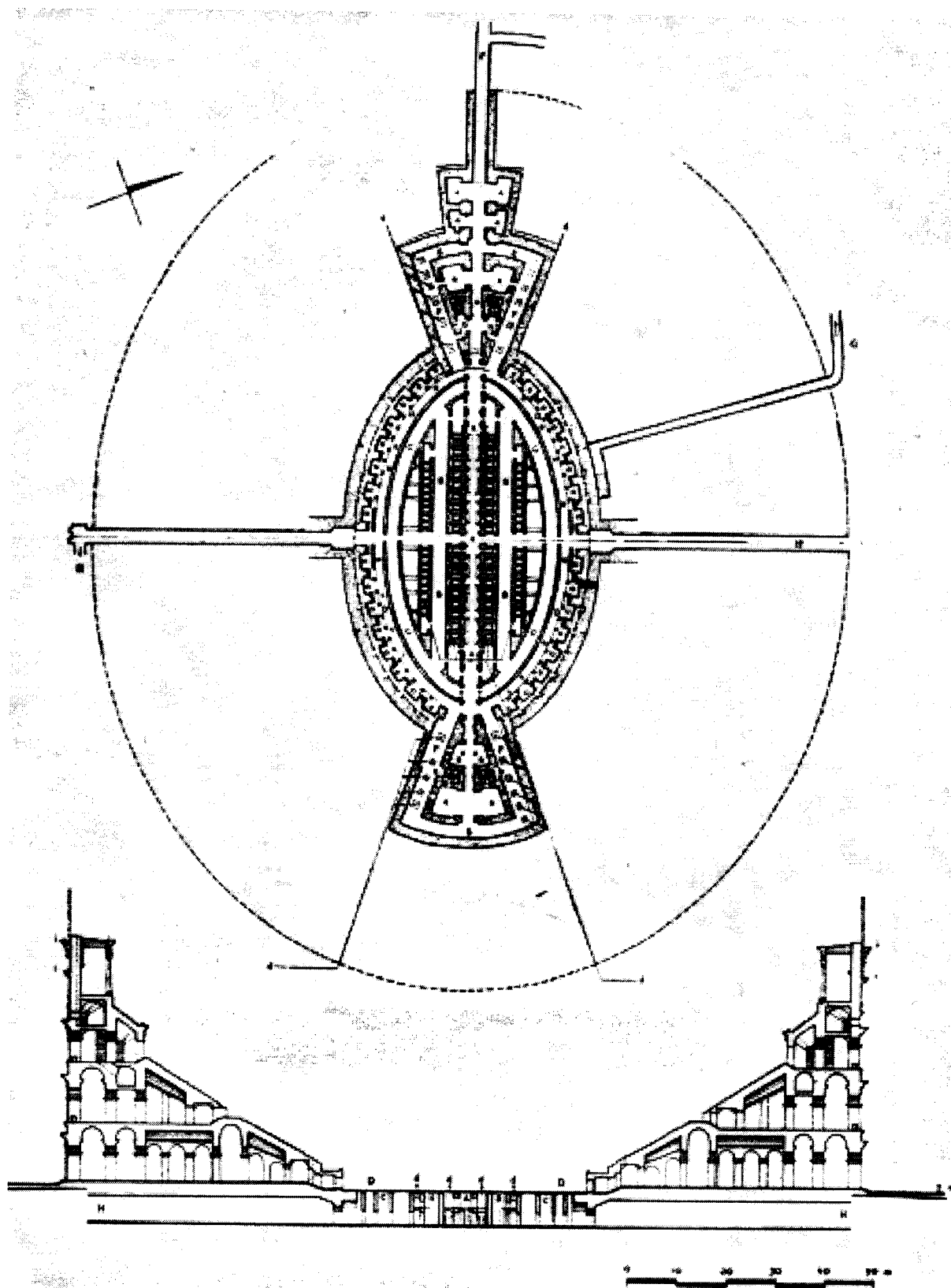


Fig. 45. Colosseum basement: Golvin (1988), Plate 37.

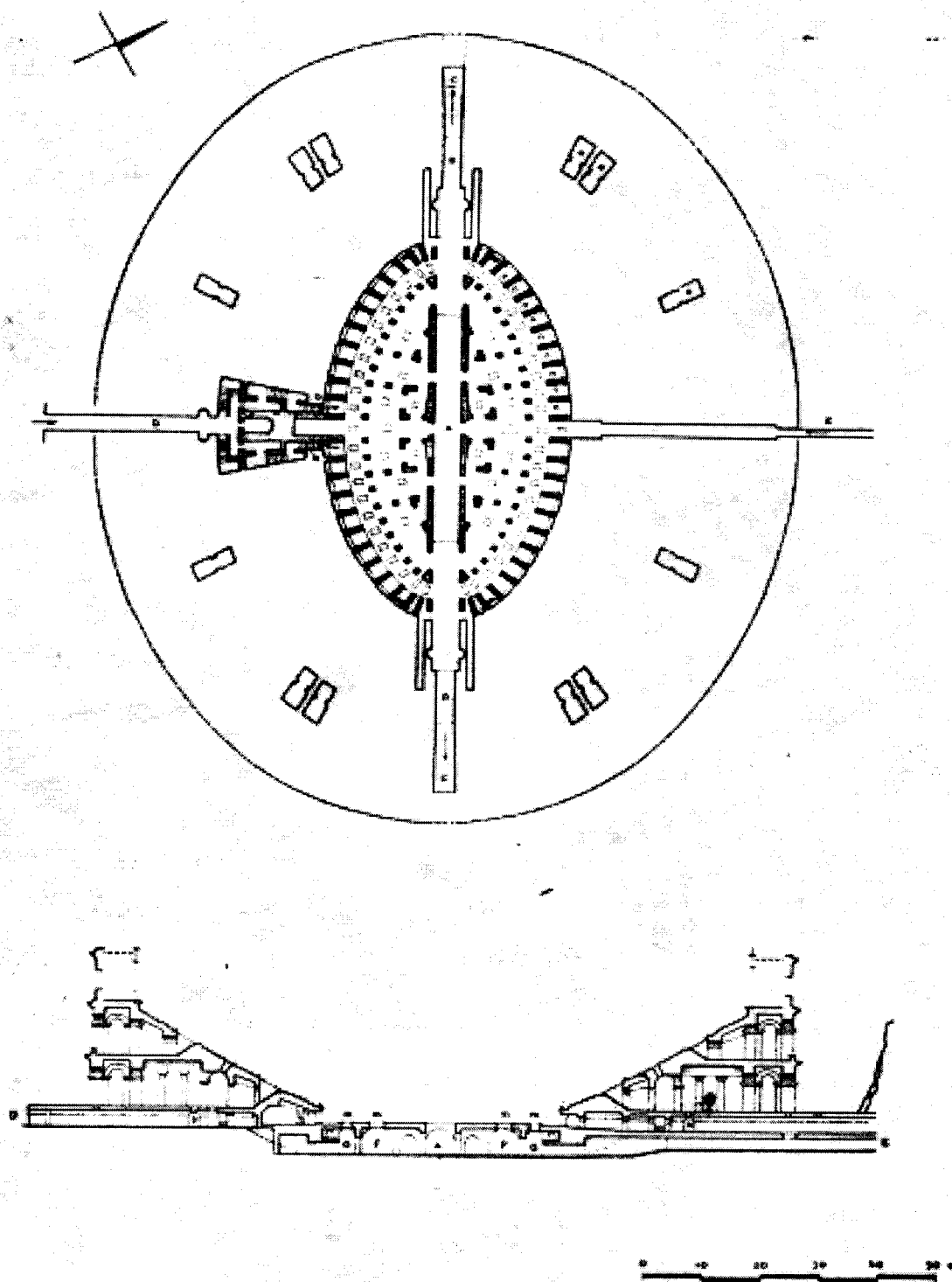


Fig. 46. Basement of Pozzuoli amphitheatre: Golvin (1988), Plate 39.

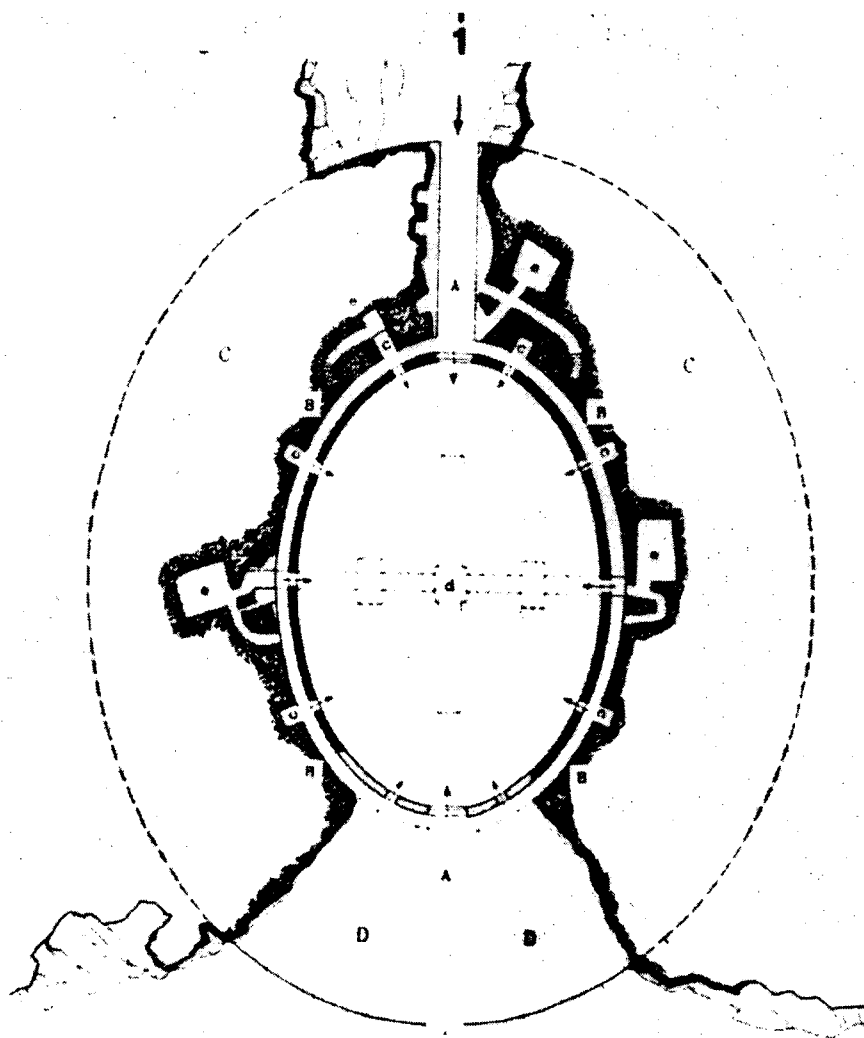


Fig. 47. Plan of Cagliari amphitheatre: Golvin (1988), Plate 28.

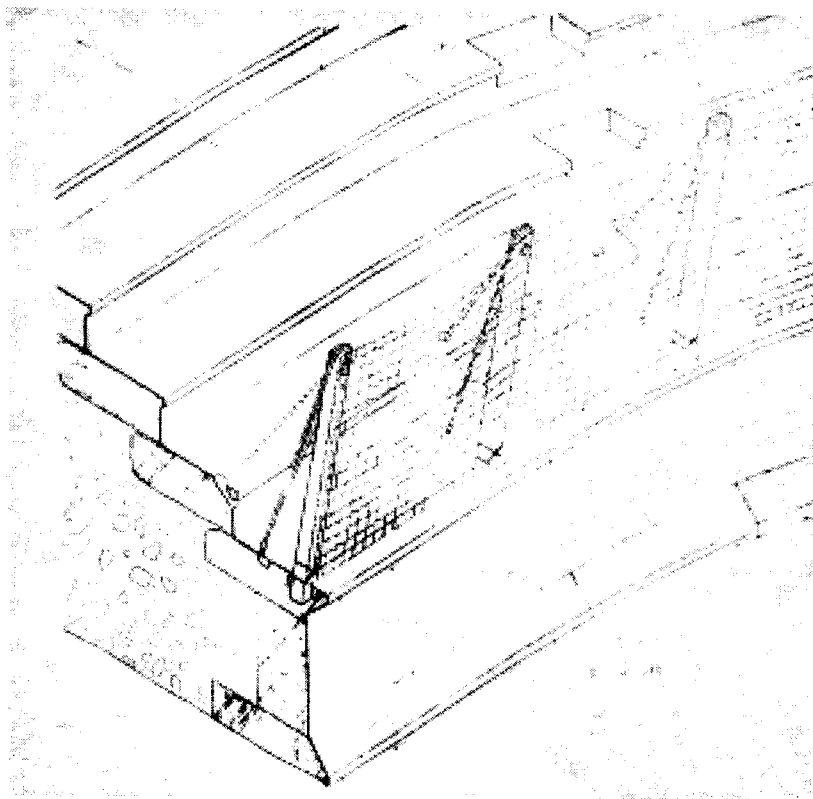


Fig. 48. Fencing of theatre at Stobi: Gebhard (1975), Page 51, figure 4.



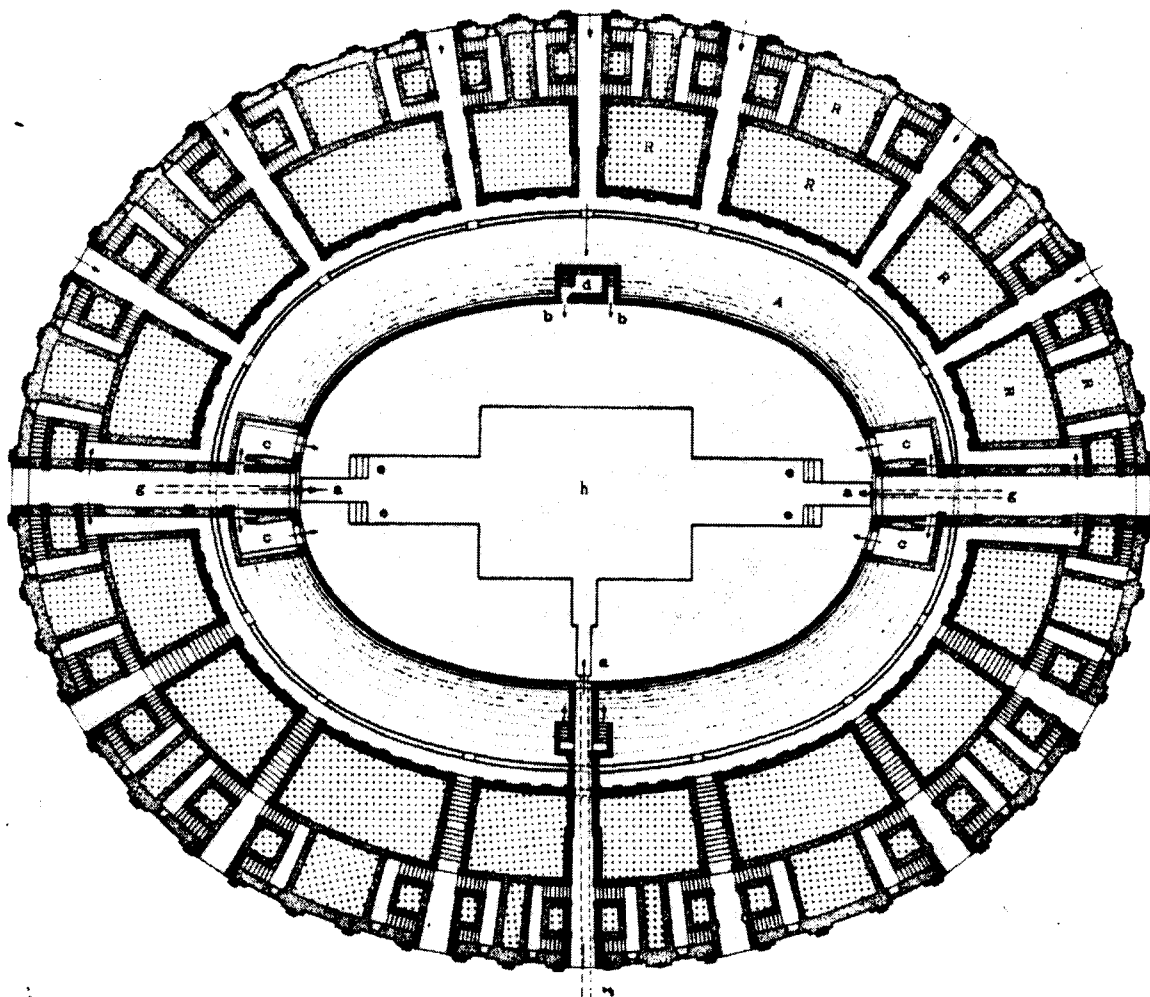


Fig. 49. Plan of Merida amphitheatre: Golvin (1988), Plate 30.



Fig. 50. Tray mold from El Djem: Ben Khader (1987), Page 225.



Fig. 51. Sabratha mosaic, Ostia: Becatti (1953), Plate 93, fig. 95.

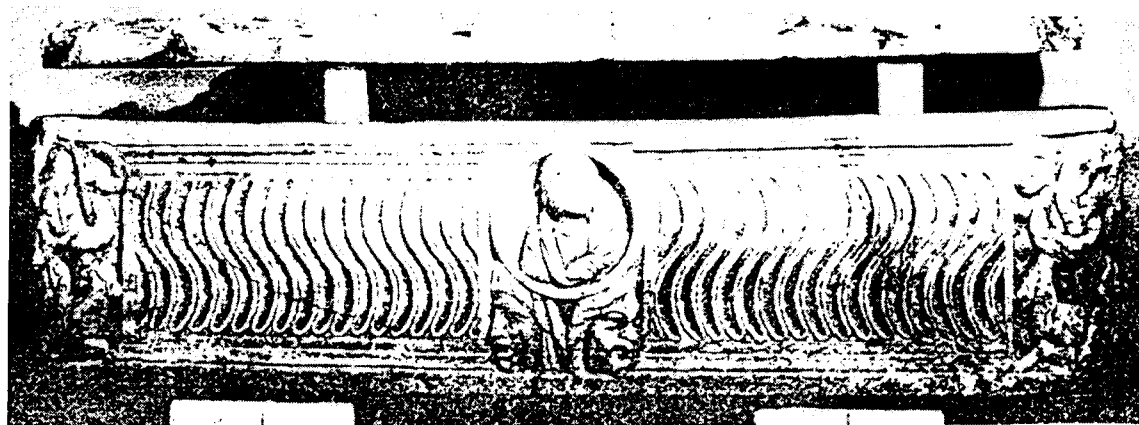


Fig. 52. Elephant sarcophagus: Mielsch (1994), Page 68, figs. 74-76.

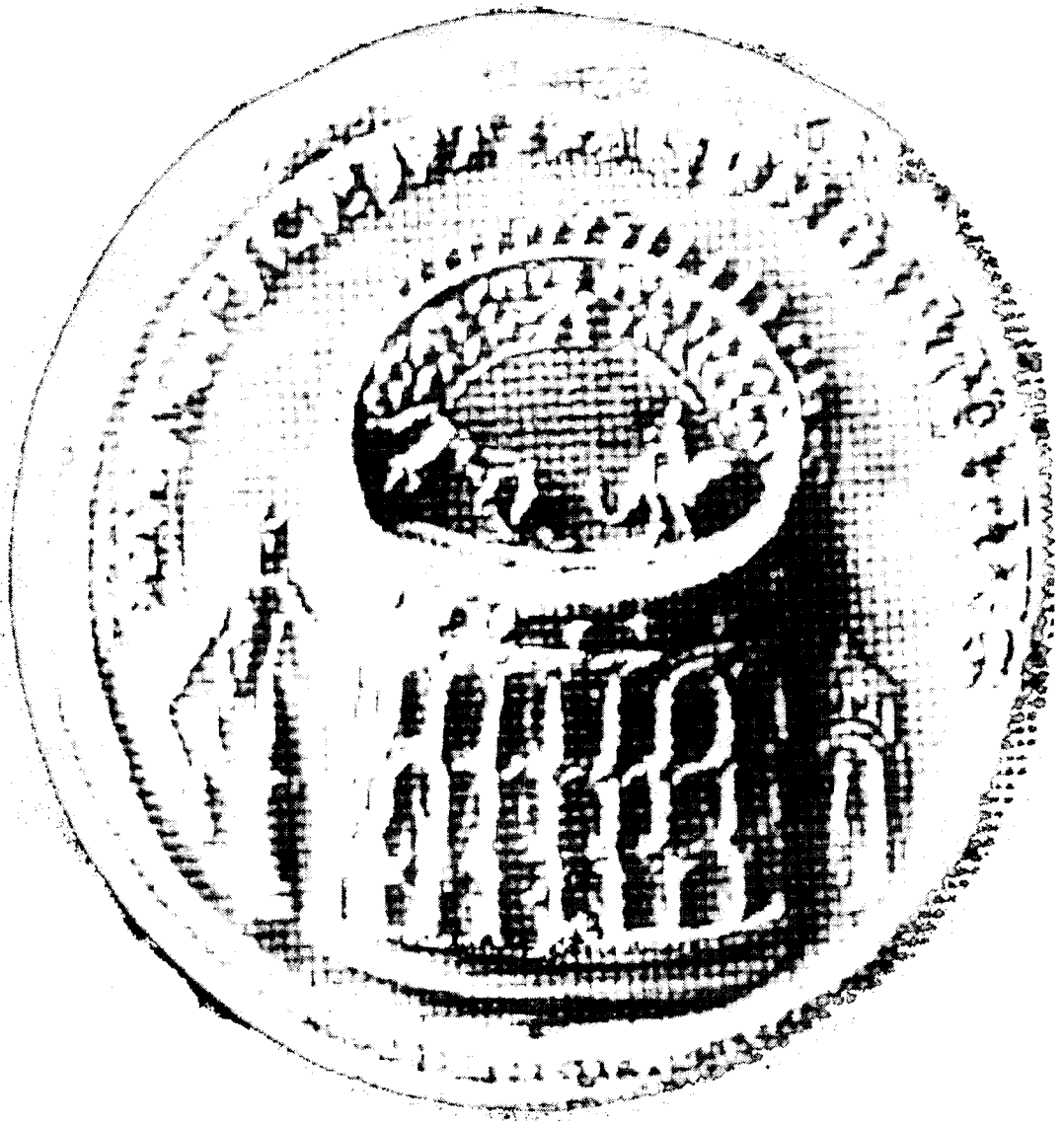


Fig. 53. Medallion of Gordian III: Weeber (1994), Fig. 31.

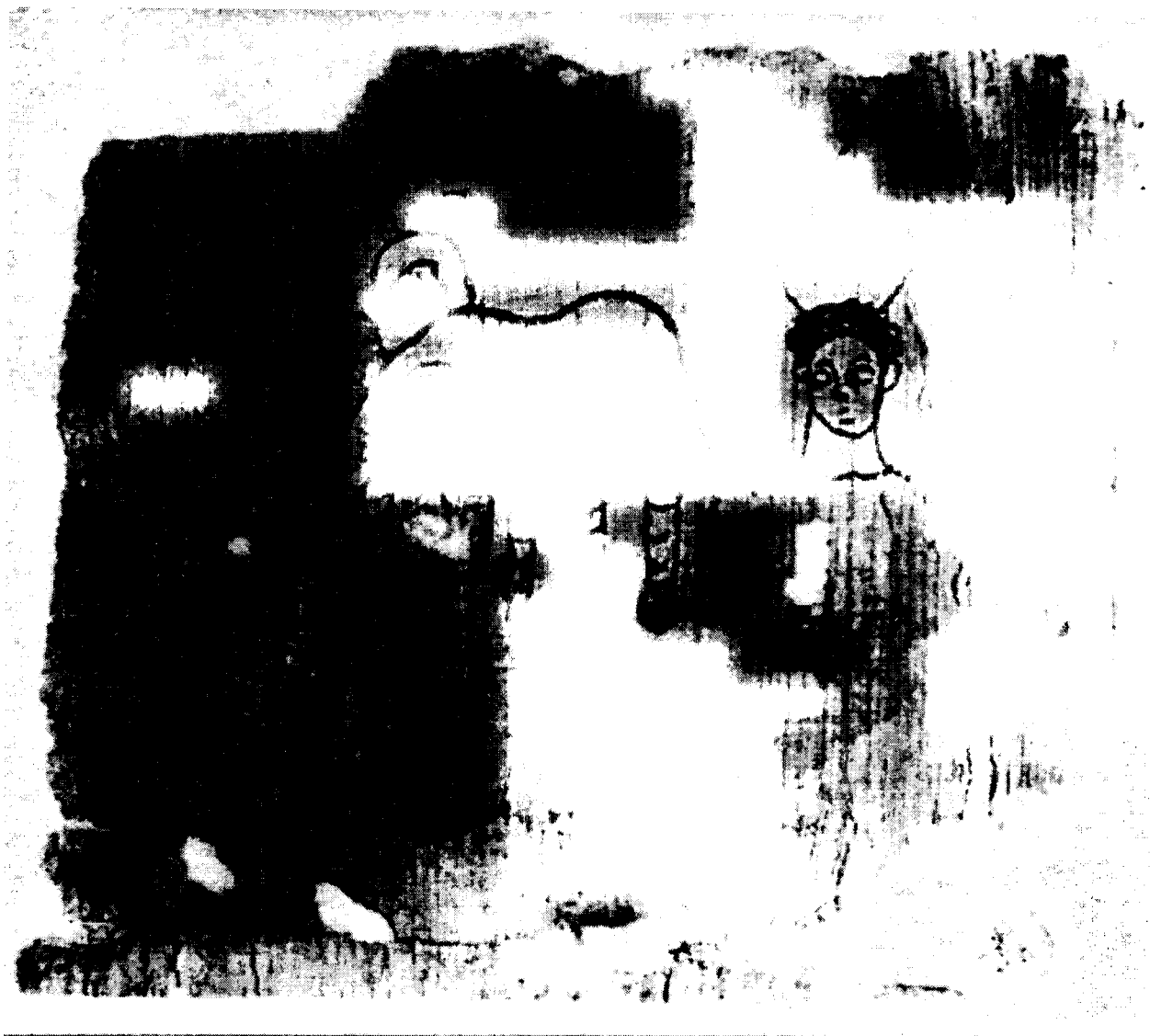


Fig. 54. Elephant papyrus: Gagos (1989), Plate 7(b).



Fig. 55. Lion diptych: Volbách (1976), Plate 32, no. 60.



Fig. 56. Antioch tiger mosaic: Toynbee (1996), Figure 23.





Fig. 57. Leopard diptych: Volbach (1976), Plate 20, no. 36.



Fig. 58. *Venator and bull* mosaic, Ostia: Becatti (1953), Plate 101, fig. 128.



Fig. 59. Borghese mosaic: Blázquez (1962), Plate IA.



Fig. 60. *Venatio* diptych: Jennison (1937), Frontspiece.

### Bibliography

- Alföldi-Rosenbaum, E. (1970) "Notes on Some Birds and Fishes of Luxury in the Historia Augusta." in Bonner Historia-Augusta-Colloquium. Bonn.
- Ampolo, C., A. Carandini, G. Pucci, and P. Pensabene. (1971) "La villa del Casale a Piazza Armerina. Problemi, saggi stratigrafici ed altre ricerche." MEFRA 83: 141-281.
- Anderson, J.K. (1985) Hunting in the Ancient World. Berkeley.
- Auguet, R. (1972) Cruelty and Civilization: The Roman Games. London.
- Aurigemma, S. (1940) "L'elephante di Leptis Magna e il commercio dell'avorio e delle *ferae Libycae* negli *emporia* Tripolitani." Africa Italiana 7:1-2: 67-86.
- Aymard, J. (1951) Essai sur les chasses romaines des origines à la fin des Antonins. Paris.
- Bacchielli, L. (1990) "I *pontarii*: una definizione per via iconografica." L'Africa romana 7: 769-72.
- Balsdon, J.P.V.D. (1969) Life and Leisure in Ancient Rome. London.
- Baratte, F. (1970) "Une mosaïque retrouvée: l'embarquement de l'éléphant de Veii." MEFRA 82: 787-807.
- Barnish, S.J.B., trans. (1992) Cassiodorus: Variae. Liverpool.
- Barrow, R.H. (1973) Prefect and Emperor: The Relationes of Symmachus AD 384. Oxford.
- Bateman, N.C.W. (1997) "The London Amphitheatre: Excavations 1987-1996." Britannia 28: 51-85.
- Beacham, R.C. (1999) Spectacle Entertainments of Early Imperial Rome. New Haven.
- Beard, M., J. North, and S. Price. (1998) Religions of Rome. 2 vols. Cambridge.
- Becatti, G. (1953) Scavi di Ostia. Vol. IV. Rome.
- Bell, H., V. Martin, et al. (1962) The Abinnaeus Archive: Papers of a Roman Officer in the Reign of Constantius II. Oxford.
- Ben Abed Ben Khader, A., and D. Soren, eds. (1987) Carthage: A Mosaic of Ancient Tunisia. New York.
- Bertrand, François. (1987) "Remarques sur le commerce des bêtes sauvages entre l'Afrique du Nord et l'Italie." MEFRA 99: 211-41.
- Beschaouch, M.A. (1977) "Nouvelles Recherches sur les Sodalités de l'Afrique Romaine." CRAI: 486-503.

- Beschaouch, A. (1987) "A propos de la mosaïque de Smirat." L'Africa romana 4: 677-80.
- Bieber, M. (1961) The History of the Greek and Roman Theater. Princeton.
- Bingen, J. (1954) "Notes sur l'Edit du Maximum." BCH 78: 349-60.
- Blackman, D. (1998-99) "Archaeology in Greece." Archaeological Reports: 1-124.
- Blanck, H. and C. Weber-Lehmann. (1987) Malerei der Etrusker in Zeichnungen des 19. Jahrhunderts. Mainz.
- Blázquez, J.M. (1962) "'Venationes' y juegos de toros en la antigüedad." Zephyrus 13: 47-65.
- Blázquez, J.M. (1993) Mosaicos Romanos de España. Madrid.
- Bomgardner, D.L. (1984) An Analytical Study of North African Amphitheatres. Ph.D. thesis: University of Michigan.
- Bomgardner, D.L. (1989) "The Carthage Amphitheater: A Reappraisal." AJA 93: 85-103.
- Bomgardner, D.L. (1992) "The Trade in Wild Animals for Roman Spectacles: A Green Perspective." Anthropozoologica: 161-66.
- Bomgardner, D.L. (2000) The Story of the Roman Amphitheatre. London.
- Bounegru, O., and M. Zahariade. (1996) Les Forces Navales du Bas Danube et de la Mer Noire aux Ier-VIe Siècles. Oxford.
- Brice, W.C. (1978) "The Desiccation of Anatolia." in W.C. Brice, ed. The Environmental History of the Near and Middle East Since the Last Ice Age: 141-47. London.
- Brown, P. (1988) The Body and Society: Men, Women, and Sexual Renunciation in Early Christianity. New York.
- Bruns, C.G. (1909) Fontes Iuris Romani Antiqui. Tübingen.
- Buonocore, M. (1992) Epigrafia anfiteatrale dell'Occidente Romano III: Regioni Italiae II-V. Sicilia, Sardinia et Corsica. Rome.
- Burkert, W. (1985) Greek Religion. Harvard.
- Burstein, S.M. (1992) "An Elephant for Anastasius: A Note on P.Mich.inv.4290." AHB 6: 55-57.
- Cagnat, R. (1963) "Portorium." in C. Daremberg and E. Saglio, eds. Dictionnaire des Antiquités Grecques et Romaines. Vol. IV: 586-94. Graz.
- Callu, J.-P., ed. (1982) Symmaque Lettres: Tome II (Livres III-V). Paris.
- Cameron, A. (1973) Porphyrius the Charioteer. Oxford.

- Cameron, A. (1976) Circus Factions. Oxford.
- Campbell, Brian. (1994) The Roman Army, 31 BC - AD 337: A Sourcebook. London.
- Capps Jr., E. (1949) "Observations on the Painted Venatio of the Theatre at Corinth and on the Arrangments of the Arena." Hesperia Suppl. 8: 64-70.
- Cartmill, M. (1993) A View to a Death in the Morning: Hunting and Nature through History. Cambridge, Mass.
- Cary, A., trans. (1961) Dio's Roman History. Vol. IX. Loeb Classical Library.
- Casson, L. (1994) Travel in the Ancient World. Baltimore.
- Casson, L. (1995) Ships and Seamanship in the Ancient World. Baltimore.
- Charlesworth, M.P. (1974) Trade Routes and Commerce of the Roman Empire. Chicago.
- Chastagnol, A. (1960) La Préfecture Urbaine à Rome sous le Bas-Empire. Paris.
- Chastagnol, A. (1976) "Les Inscriptions Constantiniennes du Cirque de Mérida." MEFRA 88: 259-76.
- Cherniss, H., trans. (1957) Plutarch's Moralia. Vol. XII. Loeb Classical Library.
- Christol, M. (1988) "Rome et les tribus indigènes en Maurétanie Tingitane." L'Africa romana 5: 305-37.
- Coleman, K.M. (1990) "Fatal Charades: Roman Executions Staged as Mythological Enactments." JRS 80: 44-73.
- Coleman, K.M. (1993) "Launching into History: Aquatic Displays in the Early Empire." JRS 83: 48-74.
- Coleman, K.M. (1996) "Ptolemy Philadelphus and the Roman Amphitheater." in W.J. Slater, ed., Roman Theater and Society: 49-68. Ann Arbor.
- Coleman, K.M. (1998) "'The contagion of the throng': absorbing violence in the Roman world," Hermathena 164: 65-88.
- Colini, A.M. (1944) "Storia e Topografia del Celio nell'Antichita." MPAA Ser. 3, Vol. 7.
- Corcoran, S. (1996) The Empire of the Tetrarchs: Imperial Pronouncements and Government. Oxford.
- Cougny, E., and E. Saglio. (1962) "Bestiae Mansuetae." in C. Daremberg and E. Saglio, eds. Dictionnaire des Antiquités Greques et Romaines. Vol. I(1): 689-705. Graz.
- Courtney, E. (1995) Musa Lapidaria: A Selection of Latin Verse Inscriptions. Atlanta.
- Cüppers, H., ed. (1984) Trier: Kaiserresidenz und Bischofssitz. Trier.

- Daltrop, G. (1969) Die Jagdmosaiken der römischen Villa bei Piazza Armerina. Hamburg.
- Darwall-Smith, R.H. (1996) Emperors and Architecture: A Study of Flavian Rome. Brussels.
- Davies, R.W. (1989) Service in the Roman Army. Edinburgh.
- Day, M. (April 1, 2000) "Jumbo Discovery." New Scientist 2232: 15.
- De Angelis D'Ossat, G. (August: 1942) "Elefanti nella Regione Romana." L'Urbe 8: 1-8.
- De Grossi Mazzorin, J. (1993) "La Fauna Rinvenuta nell'Area della Meta Sudans nel Quadro Evolutivo degli Animali Domestici in Italia." in Att del 1 Convegno Nazionale di Archeozoologia: 309-18. Rovigo.
- De Laet, S.J. (1975) Portorium. New York.
- Delbrueck, R. (1926-29) Die Consulardiptychen. Berlin.
- Demandt, A. (1989) Die Spätantike: Römische Geschichte von Diocletian bis Justinian 284-565 n. Chr. Munich.
- De Salvo, L. (1989) "I *navicularii* di Sardegna e d'Africa nel tardo impero." L'Africa romana 6: 743-54.
- Desanges, J. (1964) "Note sur la datation de l'expédition de Julius Maternus au pays d'Agisymba." Latomus 23: 713-25.
- Devijver, H. (1992) "Bears and Bisons...and the Roman Army." in The Equestrian Officers of the Roman Imperial Army. Vol. 2: 140-47. Stuttgart.
- Dinzelbacher, P., ed. (2000) Mensch und Tier in der Geschichte Europas. Stuttgart.
- Duff, J.W. and A.M. Duff, trans. (1978) Minor Latin Poets. Vol. 1. Loeb Classical Library.
- Dunbabin, K.M.D. (1978) The Mosaics of Roman North Africa: Studies in Iconography and Patronage. Oxford.
- Dunbabin, K.M.D. (1999) Mosaics of the Greek and Roman World. Cambridge.
- Edmondson, J.C. (1996) "Dynamic Arenas: Gladiatorial Presentations in the City of Rome and the Construction of Roman Society during the Early Empire." in W.J. Slater, ed. Roman Theatre and Society: 69-112. Ann Arbor.
- Edmondson, J.C. (1999) "The Cultural Politics of Public Spectacle in Rome and the Greek East, 167-166 BCE." in B. Bergmann and C. Kondoleon, eds. The Art of Ancient Spectacle: 77-95. New Haven.
- Egger, E. (1966) "Bemerkungen zu einem Salzburger Mithräum." Wiener Studien 79: 613-23.



- Egger, R. (1967) "Aus römischen Grabinschriften." Sitzungsbericht der österreichischen Akademie der Wissenschaft, 252, 3: 19-26.
- Fear, A.T. (1993) "Polar Bears in Antiquity?" LCM 18.3: 43-45.
- Ferguson, J. (1978) "China and Rome." ANRW II.9.2: 581-603.
- Firth, F. (1885) China and the Roman Orient, Shanghai.
- Fora, M. (1996a) Epigrafia anfiteatrale dell'Occidente Romano IV: Regio Italiae I. Latium. Rome.
- Fora, M. (1996b) I Munera Gladiatoria In Italia. Naples.
- Frank, T., ed. (1959) An Economic Survey of Ancient Rome. 6 vols. Paterson, N.J.
- French, R. (1994) Ancient Natural History. London.
- Frere, S.S. and R.S.O. Tomlin, eds. (1990-92) The Roman Inscriptions of Britain. Vol. II. Stroud.
- Friedländer, L. (1968) Roman Life and Manners under the Early Empire. 4 vols. New York.
- Futrell, A. (1997) Blood in the Arena: The Spectacle of Roman Power. Austin.
- Gabelmann, H. (1973) Die Werkstattgruppen der oberitalischen Sarkophage. Bonn.
- Gagos, T. (1989) "Three Short Byzantine Papyri from the Michigan Collection." ZPE 79: 273-76.
- Galsterer, Harmut. (1981) "Spiele und "Spiele": Die Organisation der *ludi Juvenales* in der Kaiserzeit." Athenaeum 69: 410-38.
- Gebhard, E. (1975) "Protective Devices in Roman Theatres." in J. Wiseman, ed. Studies in the Antiquities of Stobi. Vol. 2: 43-63. Belgrade.
- Goetz, G. (1965) Corpus Glossariorum Latinorum. Amsterdam.
- Golvin, J.-C. (1988) L'amphithéâtre romain: Essai sur la théorisation de sa forme et de ses fonctions. Paris.
- Gow, A. (1958) The Greek Anthology: Sources and Ascriptions. London.
- Gowers, W. (1950) "The Classical Rhinoceros." Antiquity XXIV: 61-71.
- Green, P. (1990) From Alexander to Actium: The Historical Evolution of the Hellenistic Age. Berkeley.
- Greene, K. (1990) The Archaeology of the Roman Economy. Berkeley.
- Gummere, R. trans. (1989) Seneca: Epistulae Morales. 3 vols. Loeb Classical Library.

- Hanson, V.D. (1990) The Western Way of War: Infantry Battle in Classical Greece. New York.
- Hayes, C.E. (1997) Between the Babylonian and Palestinian Talmuds. Oxford.
- Heinen, H. (1985) Trier und das Trevererland in römischer Zeit. Vol. I. Trier.
- Henig, M. ed. (1992) A Handbook of Roman Art. London.
- Howarth, P. (1994) Attila, King of the Huns: Man and Myth. Carlisle, PA.
- Howgego, C. (1995) Ancient History from Coins. London.
- Hughes, J.D. (1996) Pan's Travail: Environmental Problems of the Ancient Greeks and Romans. Baltimore.
- Humphrey, J.H. (1986) Roman Circuses: Arenas for Chariot Racing. Berkeley.
- Jennison, G. (1937) Animals for Show and Pleasure in Ancient Rome. Manchester.
- Jones, A.H.M. (1992) The Later Roman Empire. 2 vols. Baltimore.
- Kalinka, E. (1926) "Ein Fries von Gladiatoren- und Tierkämpfen." JOAI 23: 315-32.
- Keller, O. (1887) Thiere des classischen Alterthums in culturgegeschichtlicher Beziehung. Innsbruck.
- Keller, O. (1913) Die antike Tierwelt. 2 vols. Leipzig.
- Kießling, E. (1960) Sammelbuch griechischer Urkunden aus Ägypten. Vol. 6:2 Wiesbaden.
- Kleeman, O. (1963) "Eine neuentdeckte Bärenjagdschale." BJ 163: 198-211.
- Kockel, V. (1983) Die Grabbauten vor dem Herkulaner Tor in Pompeji. Vol. I. Mainz.
- Kolendo, J. (1969) "Épigraphie et archéologie: Le praepositus camellorum dans une inscription d'Ostie," Klio 51: 287-98.
- Kraay, C.M. (1976) Archaic and Classical Greek Coins. London.
- Krebs, W. (1965) "Einige Transportprobleme der antiken Schiffahrt." Altertum 11: 86-101.
- Kyle, D. (1995) "Animal Spectacles in Ancient Rome: Meat and Meaning." Nikephoros 7: 181-205.
- Kyle, D. (1998) Spectacles of Death in Ancient Rome. London.
- Lafaye, G. (1963) "Venatio." in C. Daremberg and E. Saglio, eds. Dictionnaire des Antiquités Grecques et Romaines. Vol. V: 680-709. Graz.

- Lanata, G. (1998) "Les animaux dans la jurisprudence romaine." in L. Botsen, ed. Les animaux exotiques dans les relations internationales: espèces, fonctions, significations. Colloques d'histoire des connaissances zoologiques 9: 53-79. Liège.
- Lanciani, R. (1979) The Ruins and Excavations of Ancient Rome. New York.
- Lanciani, R. (1990a) Storia degli Scavi di Roma. Vol. II. Rome.
- Lanciani, R. (1990b) Forma Urbis Romae. Rome.
- Lane Fox, R. (1996) "Ancient Hunting: from Homer to Polybios." in G. Shipley and J. Salmon, eds. Human Landscapes in Classical Antiquity: Environment and Culture: 119-53. London.
- Lauffer, S. (1971) Diocletians Preisedikt. Berlin.
- Lee, R.W. (1946) The Elements of Roman Law. London.
- Lehmann, S. (1990) "Ein spätantikes Relief mit Zirkusspielen aus Serdica in Thrakien." BJ 190: 139-74.
- Lepelley, C. (1992) "The survival and fall of the classical city in Late Roman Africa." in J. Rich, ed. The City in Late Antiquity: 50-76. London.
- Le Roux, P. (1990) "Le amphithéâtre et le soldat sous l'Empire romain." Spectacula I: 203-15.
- Levi, D. (1942) "The Amphitheatre in Cagliari." AJA 46: 1-9.
- Levi, P., trans. (1988) Pausanias: Guide to Greece. 2 vols. London.
- Lewis, N. and M. Reinhold, eds. (1966) Roman Civilization. Sourcebook II: The Empire. New York.
- Liebeschuetz, W. (1959) "The Syriarch in the Fourth Century." Historia 8: 113-26.
- Liebeschuetz, J.H.W.G. (1972) Antioch: City and Imperial Administration in the Later Roman Empire. Oxford.
- Loisel, G. (1912) Histoire des ménageries de l'Antiquité à nos jours. Paris.
- Luni, M. (1979) "Il Caravanserraglio di Cirene ed indagine preliminare sui percorsi interni della Cirenaica." Quaderni di Archeologia della Libia 10: 49-65.
- Mair, A.W., trans. (1928) Oppian, Colluthus, Tryphiodorus. Loeb Classical Library.
- Manganaro, G. (1982) "Die Villa von Piazza Armerina, Residenz des kaiserlichen Prokurators, und ein mit ihr verbundenes Emporium von Henna," in D. Papenfuss and V.M. Strocka, eds., Palast und Hütte: 493-513. Mainz.

- Marrou, H.I. (1978) "Sur deux mosaïques de la villa romaine de Piazza Armerina." in H.I. Marrou, Christiana Tempora: mélanges d'histoire, d'archéologie, d'épigraphie et de patristique: 253-95. Rome.
- Mattingly, H. (1927) Roman Coins. London.
- Merten, E. (1991) "Venationes in der Historia Augusta." in Historia-Augusta Colloquium 1986-89: 139-78. Bonn.
- Messineo, G. (2000) La Tomba dei Nasonii. Rome.
- Mielsch, H. (1994) "Sarkophag mit Elefantenkampfgruppen." AA: 67-71.
- Milner, N.P., trans. (1993) Vegetius: Epitome of Military Science. Liverpool.
- Mommsen, T., et al. (1985) The Digest of Justinian. Philadelphia.
- Monteagudo, G.L. (1991) "Escenas de uenatio en mosaicos hispanorromanos." Gerión 9: 245-62.
- Most, G. (1992) "*Disiecta membra poetae*: The Rhetoric of Dismemberment in Neronian Poetry," in H. Hexter and D. Selden eds. Innovations of Antiquity: 391-419. New York.
- Münzer, F. (1918) "L. Julius Caesar." RE Vol. X, 1: 471-72, n. 144. Stuttgart.
- Neal, D.S. (1981) Roman Mosaics in Britain. Gloucester.
- Nibby, A. (1839) Roma Antica. Vol. 1. Rome.
- Norman, A.F., trans. (1992) Libanius: Autobiography and Selected Letters. 2 vols. Loeb Classical Library.
- O'Flynn, J.M. (1983) Generalissimos of the Western Roman Empire. Edmonton.
- Orth, F. (1914) "Jagd." RE. Vol. IX, 1: 558-604. Stuttgart.
- Pearson, J. (1973) Arena: The Story of the Colosseum. New York.
- Pelling, C.B.R., ed. (1988) Plutarch: Life of Antony. Cambridge.
- Petit, P. (1955) Libanius et la Vie Municipale à Antioche au IVe siècle après J.-C. Paris.
- Pharr, C., trans. (1969) The Theodosian Code and Novels and the Sirmondian Constitutions. New York.
- Picard, G.C. (1944) Castellum Dimmidi. Paris.
- Platner, S., and T.Ashby. (1929) A Topographical Dictionary of Ancient Rome. London.
- Pollack, E. (1895) "Arenarius." RE. Vol. II, 1: 640. Stuttgart.
- Pollack, E. (1897) "Bestiarii." RE. Vol. III, 1: 360. Stuttgart.

- Rackham, H., trans. (1983) Pliny: Natural History. Vol. III. Loeb Classical Library.
- Raftery, B. (1994) Pagan Celtic Ireland: The Enigma of the Irish Iron Age. London.
- Richardson, R. (1992) A New Topographical Dictionary of Ancient Rome. Baltimore.
- Robert, L. (1942) "Monuments de Gladiateurs dans l'Orient Grec." Hellenica 3: 112-50.
- Robert, L. (1948) "Monuments de Gladiateurs dans l'Orient Grec." Hellenica 5: 77-99.
- Robert, L. (1949) "Monuments de Gladiateurs dans l'Orient Grec." Hellenica 7: 126-51.
- Robert, L. (1950) "Monuments de Gladiateurs dans l'Orient Grec." Hellenica 8: 39-96.
- Robert, L. (1971) Les Gladiateurs dans l'Orient Grec. Amsterdam.
- Robinson, O.F. (1994) Ancient Rome: City Planning and Administration. London.
- Robinson, O.F. (1997) The Sources of Roman Law. London.
- Rodenwaldt, G. (1937) "Ein attischer Nachklang in den Alpen." Ephemeris Archaologische Part I: 134-39.
- Rosenblum, M. (1961) Luxorius: A Latin Poet among the Vandals. New York.
- Rostovtzeff, M.I. (1952) Excavations at Dura-Europos III: The Palace of the Dux Ripae and the Dolicheneum. New Haven.
- Rostovtzeff, M. (1963) The Social and Economic History of the Roman Empire. Oxford.
- Roth, J.P. (1999) The Logistics of the Roman Army at War (264 B.C.-A.D. 235). Leiden.
- Roueché, C. (1993) Performers and Partisans at Aphrodisias in the Roman and Late Roman Periods. London.
- Sabbatini Tumolesi, P. (1980) Gladiatorum Paria: Annunci di Spettacoli Gladiatorii a Pompei. Rome.
- Sabbatini Tumolesi, P. (1988) Epigrafia anfiteatrale dell'Occidente Romano I: Roma. Rome.
- Saglio, E. (1962) "Contomonobolon." in C. Daremberg and E. Saglio, eds. Dictionnaire des Antiquités Grecques et Romaines. Vol. I(2): 1485. Graz.
- Salomonson, J.W. (1960) "The Fancy Dress Banquet." BABesch 35: 25-55.
- Scarborough, J. (1985) "Galen's Dissection of the Elephant." Koroth 8: 123-34.
- Schulten, A. (1925) "Legio III Augusta." RE Vol. XII, 2: 1493-1505. Stuttgart.
- Scobie, A. (1988) "Spectator Security and Comfort at Gladiatorial Games." Nikephoros: 191-243.

- Scullard, H. (1970) From the Gracchi to Nero. London.
- Scullard, H.H. (1974) The Elephant in the Greek and Roman World. London.
- Scullard, H.H. (1981) Festivals and Ceremonies of the Roman Republic. London.
- Sear, D.R. (2000) Roman Coins and their Values. Vol. I. London.
- Settis, S. (1975) "Per l'interpretazione di Piazza Armerina." MEFRA 87: 873-994.
- Settis, S. (1982) "Neue Forschungen und Untersuchungen zur *villa* von Piazza Armerina." in D. Papenfuss and V.M. Strocka eds., Palast und Hütte: 515-34. Mainz.
- Shackleton-Bailey, D.R., trans. (1993) Martial: Epigrams. 3 vols. Loeb Classical Library.
- Shaw, B.D. (1981) "Climate, environment, and history: the case of Roman North Africa." in T.M.L. Wigley, M.J. Ingram, and G. Farmer, eds. Climate and History: Studies in past climates and their impact on Man. Cambridge.
- Shelton, Jo-Ann. (1999) "Elephants, Pompey, and the Reports of Popular Displeasure in 55 BC." in S.N. Byrne and E.P. Cuerva, eds. Veritatis Amicitiaeque Causa: Essays in Honor of Anna Lydia Motto and John R. Clark: 231-71. Wauconda, Ill.
- Singer, C., trans. (1956) Galen on Anatomical Procedures. Oxford.
- Sperber, D. (1974) Roman Palestine 200-400: Money and Prices. Ramat-Gan, Israel.
- Strong, D. (1968) The Early Etruscans. New York.
- Taubenschlag, R. (1955) The Law of Greco-Roman Egypt in the Light of the Papyri. Warsaw.
- Ternes, C.M. (1986) Römisches Deutschland. Stuttgart.
- Thomas, R.F., ed. (1988) Virgil: Georgics. Vol. 1. Cambridge.
- Thompson, L.A. (1989) Romans and Blacks. Norman, Okla.
- Thouvenot, R. (1950) "Les 'Lions' de Caracalla." REA 52: 278-87.
- Tod, M.N. (1904) "The Παιδικὸς Ἀγὼν at the Festival of Artemis Orthia at Sparta." Ath. Mitt. 29: 50-56.
- Tortorella, S. (1981) "Le Lastra Campana: Problemi di Produzione e di Iconografia." in L'art décoratif à Rome à la fin de la République et au début du Principat: 61-80. Rome.
- Toynbee, J.M.C. (1996) Animals in Roman Life and Art. London.
- Traversari, G. (1960) Gli Spettacoli in Acqua nel Teatro Tardo-Antico. Rome.

- Velkov, V., and G. Alexandrov. (1988) "'Venatio Caesariana': Eine neue Inschrift aus Montana (Moesia Inferior)," Chiron 18: 271-77.
- Veyne, P., ed. (1987) A History of Private Life. From Pagan Rome to Byzantium. Cambridge, Mass.
- Ville, G. (1960) "Les Jeux de Gladiateurs dans l'Empire Chrétien." MEFRA 72: 273-335.
- Ville, G. (1981) La gladiature en Occident des origines à la mort de Domitian. Rome.
- Volbach, W.F. (1976) Elfenbeinarbeiten der Spätantike und der frühen Mittelalters. Mainz.
- Von Petrikovits, H. (1960) "Die Spezialgebäude römischer Legionslager." in Das römische Rheinland: archäologische Forschungen seit 1945: 229-52. Cologne.
- Wahl, J. (1977) "Gladiatorenhelm-Beschläge vom Limes." Germania 55: 108-32.
- Walbank, M.E.H. (1997) "The Foundation and Planning of Early Roman Corinth." JRA 10: 95-130.
- Ward-Perkins, B. (1984) From Classical Antiquity to the Middle Ages: Urban Public Building in Northern and Central Italy AD 300-500. Oxford.
- Weeber, K-W. (1994) Panem et Circenses. Mainz.
- Weege, F. (1909) "Oskische Grabmalerei." JDAI XXIV: 99-162.
- Weissenborn, W., and H.J. Müller. (1965) Titī Livi ab Urbe Condita Libri. Vol. IX. Zürich.
- Welch, K. (1994) "The Roman arena in late-Republican Italy: a new interpretation." JRA 7: 59-80.
- Welch, K. (1998) "Greek stadia and Roman spectacles: Asia, Athens, and the tomb of Herodes Atticus." JRA 11: 117-45.
- Welles, C.B., et al. (1959) The Excavations at Dura-Europos: Final Report V, Part I. (New Haven.
- White, K.D. (1970) Roman Farming. Ithaca.
- Whitehouse, H. (1991) "The Elephant and its Keepers: A Postscript on P.Mich.inv. 4290." ZPE 85: 277-78.
- Wiedemann, Thomas. (1995a) Emperors and Gladiators. New York.
- Wiedemann, Thomas. (1995b) "Das Ende der römischen Gladiatorenspele." Nikephoros 8: 145-59.
- Wightman, E.M. (1970) Roman Trier and the Treveri. London.

Wright, W., trans. (1968) The Chronicle of Joshua the Stylite. Amsterdam.

Wünsch, R. (1900) "Neue Fluchtafeln." Rheinisches Museum 55: 232-71.