COYOTE GOES DOWNRIVER:
AN HISTORICAL GEOGRAPHY OF COYOTE MIGRATION
INTO THE FRASER VALLEY

by

LILLIAN FORD

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Department of Geography
The University of British Columbia
Vancouver, Canada

Date August 29, 2000
This thesis considers the spread of coyotes into the Fraser Valley from an historical/geographical perspective. Using the models of Coyote and Canis latrans, it follows coyotes from their traditional range in Nlha7kapmx territory into the Fraser Valley and eventually the city of Vancouver. In doing so, it examines both changing landscapes and changing perceptions of predators over the past 125 years. In much the same way as it has distinguished “wilderness” from “civilization,” the settler imagination has separated the paths, patterns, and places of wildlife from those of human settlement. This thesis introduces an animal who has persistently challenged those boundaries.

In Nlha7kapmx traditions, Coyote is a transgressive character, a clever opportunist, a powerful transformer, and an irrepressible trickster who may be killed repeatedly but always revives. These same qualities can be seen in scientific descriptions of coyotes. The ways of coyotes — their adaptability, intelligence, and social geography — have helped them withstand persecution and inhabit new environments. Coyotes appear in places we do not expect, and, as predators, in places that we actively defend from their presence.

Coyotes were first reported in the Fraser Valley in 1892, following the completion of the railway and the commencement of agricultural settlement. Today they are commonly seen throughout the region. Their presence has been the object of successive campaigns to exterminate, control, and, eventually, co-exist with them. From the bounty system to widespread poisoning and the designation of “problem animals,” these efforts have been shaped by changing understandings of the place of wildlife in relationship to settlement, and the complex geographies of coyotes themselves. This thesis argues that coyote control has been a losing battle: an attempt to claim space from a species that thrives in the margins; an effort to exterminate quintessential survivors. The evolution of coyote control in B.C. is best understood as a progressive concession of space.
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INTRODUCTION

Making its way across British Columbia, the Fraser River explores boreal forest and broad desert terraces before it spills out onto a green marshy delta, now largely drained and paved. The city of Vancouver sits at its mouth, and it is here, at the southwest edge of town, that I sit, watching the river, thinking about the changes it has seen and the cast of characters it has carried to the sea. I think of Simon Fraser, the river's namesake, but foremost in my mind is Coyote, the trickster who was seen in Fraser's canoe as it passed through Nlha7kapmx territory, 400 km upstream. Fraser was leading the first European expedition down the river that now bears his name, but this was not the first time Coyote had tested these waters. In sptakwelh times he had floated down the river as a board, and returned with salmon running behind him.¹

Coyote, the trickster who lived in the days before animals and humans were created, occupies a central place in Interior Salish traditions. A master of improvisation, Coyote pieced together the world -- and saved his skin -- with tricks and ad-libbed transformations. Coyote was a visitor to the coast, and only worked his magic in the dry interior, where countless natural features bear the names he gave them. Coast Salish areas, including Vancouver and the Fraser Valley, were shaped by a set of Transformers, the Qoal’kwelh.²

Since those days, this coastal world has seen many changes, perhaps most dramatically in the past 100 years. Drained, deforested, and paved, its native fauna have been driven off by guns and loss of habitat. Its ecology is new, a mosaic of trimmed grass, asphalt, row crops and thin forest, populated by imported domestic species and hardy, adaptable weeds.

Here by the Fraser, people walk their horses and spaniels and hit golf balls on manicured bluegrass. The wolves are gone, so are the cougars and bears. But another predator, far more resilient, has taken up residence. Behind thickets of blackberries, it digs its dens, and feeds its pups pieces of housecats. It's Coyote again, or rather, the wild dogs called coyotes, who manifest something of his spirit. They have followed their namesake down the banks of the river. To get here, they have needed a few tricks of their own.
This thesis considers the spread of coyotes (Canis latrans) into the Lower Fraser Valley. I begin with where the coyotes came from — Nlha7kapmx territory — then track their expansion into the Lower Fraser Valley and eventually the city of Vancouver. By following coyotes around these different places, I gain not only a better understanding of the animal, but also a geography lesson.

There is something fitting in this, as according to the Nlha7kapmx, it was Coyote who “put the world in order.” A perpetual traveller, Coyote's exploits became geography: the shapes of rocks and ridges and the names of hills and waterfalls; the boundaries between tribes; and mental maps through Nlha7kapmx territory. Coyote stories navigate paths through both the Interior landscape, and the moral terrain of Nlha7kapmx society, especially as it relates to nature and the treatment of animals. They also reflect the improvisations and transgressions of Coyote's four-legged descendants.

Few settlers named their places after Coyote, a character they did not understand, and namesake of an animal they despised. Some found coyotes good for hunting, or ridding their fields of rodents, but most saw no place for them in their pastoral visions. The reactions of settlers to coyotes says much about their values in relationship to wild nature. Changes in these reactions, with the persistence and expansion of coyotes throughout the Lower Mainland, provide a history of ideas about wildness, predation and meanings of place. These ideas, and the exclusions and proscriptions they entail, are both conceived of spatially and reinforced by spatial measures.

As outcasts and transgressors, coyotes, like their namesake, are also geography teachers. They show us the boundaries we create between us and them, and between wild and managed landscapes. As mobile representatives of "wildness" they force these boundaries to be continually asserted, enforced -- or conceded. They remind us that the line between us and them cannot be kept in place, as it is composed of moving and unpredictable points: living animals that pursue their own paths and patterns, their own geographies. These geographies tell us much in themselves. In the Lower Fraser Valley, they show us
where deep forest has been felled and marshes drained; where voles thrive and wolves recede. Coyote expansion sketches the contours of landscape change.

It also suggests that, much as we might alter the ecology of a region, we cannot remove it. When we destroy the ecology of a wetland, or an ancient temperate rainforest, we replace it with the ecology of cities, the ecology of farmland, the ecology of sprawl. The presence of coyotes in these landscapes reminds us that the natural and the cultural are inseparable spheres. By crossing over boundaries between the “wild” and the “civilized”, coyotes render them more visible; yet they also blur them. Their presence in the city makes us rethink the meaning of both city and coyote, to question whether the coyote is out of place or if the place is different than we thought.

Representing animals

I recognize that my ability to represent coyotes is limited by the profound differences between species, and my limited contact with these animals. I have dragged a coyote off a road, I have whizzed past pups along the freeway, I have sat on my haunches and watched a coyote, who sat on her haunches and watched me. I have read a lot about them. That's about it. I cannot speak for coyotes, or pretend to reveal the truth of their lives.

Fundamental, thorny issues surround the representation of animals. I have arbitrated these with the help of writings by critical geographers, environmental historians, anthropologists, art historians, philosophers, and cognitive ethologists. Many of these works consider possible spaces between anthropomorphism and anthrocentrism, sameness and otherness, in which to locate non-human subjectivity.

I assert that coyotes are sentient, intelligent individuals, participants and shapers of complex social structures. They are not objects acting within a transparent landscape, but agents engaged with the world on the basis of their own perceptions and constructions, their own experiences of place. I try to impart this sense with minimal anthropomorphic pretense. I recognize that while this thesis primarily examines human
relationships with coyotes, our perceptions of wildlife and the boundaries between us and them, it is also informed by the actions of flesh-and-blood animals, however distant my relationship with them may be.

Because I know little about coyotes in any direct way, I use as my authority the written record, which traces and tracks coyotes through settler and -- less frequently -- Native landscapes. In some ways, I know my subject like a scavenger knows the fresh kill of wolves. I skirt around the feeding pack, snatching bits and pieces; I pick up what I can from the outside -- outside the times and places I write about, outside the cultures of Coyote, outside the species barrier that separates coyotes from the rest of the world. Inside, and away from, the fields and thickets, the paths and patterns, in which coyotes live their lives.

Organization of the Thesis

This story is told in three parts -- Upriver, Downriver, and City -- followed by a short conclusion. Each section contains three chapters, with the exception of the City, which is itself a chapter. The three sections correspond to the experiences of coyotes in Nlha7kapmx territory, the Lower Fraser Valley, and the City of Vancouver, respectively, as well as to three different time periods -- sptakwelh times -1900; 1873 to 1999; and 1982 to present. This story is simultaneously a chronological and chorological account of coyote expansion, as well as a history of human attitudes and policies towards coyotes. This correspondence between time, place, and attitude is of course too neat to be taken as given. It is simply an organizing device that foregrounds issues that I wish to emphasize, and gives a sense of rhythm and pattern to the narrative.

The time periods I have chosen somewhat arbitrarily, especially the ending dates (coyotes have not disappeared from any of the three areas); the beginning dates mark the first recorded appearance of coyotes in each area. Science has no date for a first appearance of coyotes in Nlha7kapmx territory. In Nlha7kapmx tradition, coyotes appeared at the end of the mythological period, when the sptakwelh were turned into the animals that bear their names. I begin the Upriver section with the sptakwelh period; the next chapter discusses coyotes, as science describes them, and is largely ahistorical. I then make a very large leap in time, to the late 19th century, when coyotes began their southwestern migration. My intention is to place
the migrating coyotes within a contemporary context; to show where those coyotes came from, the
conditions in which they lived, and their relationship to both Nlha7kapmx society and the emerging settler
world.

The Nlha7kapmx have a long history of co-existence with coyotes. By choosing such a late starting date, I
do not wish to deny the historicity of the Nlha7kapmx people, or represent their society as static. It's just
that I don't know -- and to a large degree can't know -- pre-contact history. So I leap to the first written
records that help me reconstruct -- quite speculatively -- Nlha7kapmx relationships with coyotes, as well as
with wild animals and "nature" in general. Lastly, perhaps the biggest pitfall in my chronological ordering
of this thesis is the concentration of Nlha7kapmx material in the beginning. Too often histories follow an
evolutionary progression that posits "nature," then "Indians" as precursors to "history," which begins with
white settlement. I in no way intend to do this, or present the Nlha7kapmx as a culture of the past. This
thesis begins with the Nlha7kapmx because the Lower Fraser Valley coyotes came from their territory.
Coyotes, and their namesake, are alive and well in current Nlha7kapmx culture.

The geographic divisions must also be qualified. This is a story of expansion not exodus. Although my
narrative leaves Nlha7kapmx Territory around 1900, the coyotes didn't leave. Nor did those who remained
live in the same environment as their ancestors. As the last part of the chapter reveals, "Upriver" was not
immune to "Downriver" attitudes or policy. Predator policy was applied province-wide, and the
development of cattle and sheep ranching in Nlha7kapmx territory created both new opportunities for
coyotes and widespread persecution. I discuss the evolution of predator control policy in the Downriver
section, but do not confine my discussion to the Fraser Valley. Downriver (like Upriver and City) is both a
geographical location (the Fraser Valley) and a metaphor for the society that predominantly occupied and
controlled it during the relevant time period. Overlap, administrative and otherwise, also occurs between
the Fraser Valley and the City. Finally, although this is a story of expansion, I am not certain where,
specifically, the coyotes who came to the Fraser Valley originated. Many likely travelled down the
Canadian Pacific Railroad tracks. It is assumed that coyotes in Vancouver came from the Fraser Valley,
although emigration from Washington State is also possible.
This section features three short essays that provide an alternative context, both geographic and conceptual, for those that follow. The first two essays concern Coyote and coyotes, respectively, in the Nlha7kapmx world. The third one considers Nlha7kapmx and settler relationships with coyotes in the years surrounding their migration into the Fraser Valley. In preparing this thesis I have gained an appreciation of the importance of First Nation perspectives in understanding native wildlife, as well as of the inaccessibility of this perspective, especially in pre-contact history and the sp'akwelh period, for a non-Native person working on a short project. This section asks major questions and answers minor ones; in places it is necessarily suggestive and brief.

Chapter 1 introduces Coyote, one of the First People of the Nlha7kapmx, whose spirit is manifest in coyotes. In doing so, it draws on two published collections of Nlha7kapmx stories: one gathered by James Teit in 1900, and the other by Darwin Hanna and Mamie Henry in 1995. Other writings on the Nlha7kapmx by Teit add to this sketch of Coyote. To strengthen my reading of Coyote stories, I draw on two scholars who have collaborated with Native American storytellers in Washington, Oregon and California to develop literary analyses of Coyote stories. Anthropological linguist William Bright analyses Coyote as a literary figure, and compares coyote behavior, as described by science, with the character and conduct of Coyote. Literary anthropologist Jarold Ramsey offers thoughts on the functional meanings of Coyote within Native American societies. I also draw insight from Roberta Haines, who discusses Coyote in Plateau culture.

Coyote is an irrepressible figure, a greedy, fibbing, braggart who is always overstepping bounds. When he does so seriously, he usually pays a price. In doing this research, I have wanted to know more than I actually do, say more than I rightfully can, and offer my own ungrounded assertions as truth. Coyote is an irresistible character, and I have, in the writing of this thesis, wished to lay claim to his secrets and
sensibilities. Yet if I circled around for fifty years, trying to snatch the meaning of him, I would at best grasp bits and pieces. All I can offer is an outsider’s version of it all.

If this is the best I can do, why look at Coyote at all? I could not tell this story without doing so. Coyote stories convey understandings of the animal refined over thousands of years of coexistence. Coyotes are just as much the manifestation of Coyote, as they are the embodiment of *Canis latrans*. Inaccessibility is no reason to ignore Coyote traditions, but rather greater reason to acknowledge their existence.

Although this thesis does not use science as the standard of definition, it does rely on it considerably. Chapter 2 brings us into historical time, after the *sptakwelh* have been made into humans and animals. I rely on current scientific descriptions of coyotes to provide basic information on their lives as grassland animals. These descriptions are based on observed and (mostly) quantified traits, behaviors, and demography, and they bear striking resemblance to Coyote. Both Coyote and *Canis latrans* are essentialist interpretations of coyotes, but there are no essential coyotes. Adaptable and neotenal, coyotes are historical beings. They have individual and social histories much fuller than I can capture.

Chapter 3 covers the years immediately prior to coyote migration into the Lower Fraser Valley. It looks at Nlha7kapmx use of coyotes, as described by James Teit; including their apparent domestication. It also considers the effects of emerging settler society: roads, ranches, and men in red riding coats are a few of the changes that upriver coyotes encountered. The chapter also highlights some basic, general differences between Nlha7kapmx and settler attitudes.

**Downriver**

This section looks at fundamental features of the settler-coyote relationship, particularly the role of agricultural settlement in the expansion of coyotes in the Fraser Valley; the evolution of predator control policy; and the vilification and partial redemption of coyotes in the settler imagination. I emphasize the spatial dimensions of these relationships, as the place of coyotes in the Fraser Valley, and in the “balance of nature” was recast and debated.
Chapter 4 first describes the Fraser Valley prior to European occupation; it then notes landscape alterations made prior to 1892, and the ecological opportunities these presented for coyotes. With increased settlement, these changes amounted to a programme of "ecological cleansing," in which unwanted species were driven off or exterminated and replaced by intensively managed (and largely non-native) landscapes. The spread of coyotes into the Fraser Valley is discussed in this context.

Chapter 5 looks at coyote control efforts over the past 110 years, and how these have shifted in response to changing views of predation and the complex geographies of the coyotes themselves. It is in predator control that the negotiation of boundaries between wildlife and human settlement is most transparent. Predator control has become increasingly flexible and case-specific, and has increasingly conceded space to coyotes.

As predator control moved from a grand scientific model to localized solutions, from the condemnation of the entire species to the isolation of deviant individuals, the "where" of coyotes became even more important, especially as their numbers increased. Chapter 6 looks at the rebound of coyotes in the Fraser Valley, and the nature and geography of complaints from 1978 to present day.

The City

Although coyotes have been on the outskirts of the city of Vancouver since the late 1890's, they became an obvious presence in the city only in the last 20 years. Since then they have been denning in city parks, dining on housecats, and startling passerby who believe the city has nothing to offer a sizable carnivore. As large predators, coyotes stand out. They're not what we think of when we think of city wildlife: small animals dependent on human waste and handouts, little birds and squirrels who fit about our backyards and picnic areas. Over 200 coyotes live in Vancouver, but they are neither displaced or dependent. They're here because the city is a banquet for an adaptive generalist; because those little mice and squirrels, as well as Fifi and Fluffy, are not just human dependents or visual amenities, but agents in a functioning ecosystem.
Chapter 7 looks at coyote presence in the city of Vancouver. It examines the urban ecosystem and the opportunities it provides for coyotes, as well as the management of coyotes in the city.

In much the same way as it has distinguished “wilderness” from “civilization,” the settler imagination has separated the paths, patterns, and places of wildlife from those of human settlement. These seven chapters give an introduction to an animal who has persistently challenged these boundaries. Coyotes appear in places we don’t expect, and, as predators, in places that we actively defend from their presence. Their transgressions both unsettle and highlight the way we imagine our place in relationship to the “wild.” Here in the city, they push the envelope of acceptance; they prey on our pets and raise the hair on our arms in nighttime encounters. They bring predation back into our lives, and an indefinable quality that many appreciate. As a cabdriver once told me, as we talked about coyotes: “It’s good to see something wild in the city.” Perhaps, through the persistence of his four-legged representatives, Coyote has begun making changes on the coast.

1Sptakwelh is a Nlha7kapmx word referring to the age before the present one, when the world was inhabited by people who possessed qualities and powers of animals. At the end of this period, the good people were turned into humans, and the bad people into the animals which bear their names. The story of Coyote’s first trip downriver is told in “Nli’kesentem,” in James Teit, Mythology of the Thompson Indians, Vol. 8, Part 2, Publications of the Jesup North Pacific Expedition, E.J. Brill: Leiden and G.E. Stechert, New York, 1912, p. 296.
2Teit, Mythology, p. 295.
5Teit, Mythology, p. 296.

11 Wolch and Emel, *Animal Geographies*, p. 5
UPRIVER
CHAPTER 1

OLD COYOTE

"A long time ago the country along the Thompson River east of Lytton was inhabited by the Coyote people. The surrounding country to the east and south was also occupied by them; but they were probably more numerous around Spences Bridge, Nkamci'n, and the immediate neighborhood than any other place. The chief of these people was the Old Coyote. He was great in magic. No person could vanquish him or kill him; and it is said he could never die."

Long before humans, Coyote wound his way through Nlha7kapmx territory, and the landscape bears witness to his rangings. "Travelling here and there, working wonders, changing and modifying the existing order of things," this was the project of the trickster-transformer, who roamed (and rearranged) the region during the sptakwelh period. The world was different then; there were no trees, berries, or salmon, many landforms were missing, and the line between people and animals had yet to be drawn. The people, the sptakwelh, were "mostly animals, who, nevertheless, had human form." Anthropological linguist William Bright describes the sptakwelh as the "members of a race of mythic prototypes who lived before humans existed...They had names that we now associate with animals, and they sometimes had features, physical or psychological, that we now associate with those animals...the [sptakwelh] do not seem to have been unambiguously either human or nonhuman in form."

Coyote was sent by the Old Man "to put the world in order, so that the people might live more easily and happily." Yet as he travelled and transformed the geography of the Thompson Plateau, he kept his own interests foremost in mind. Most of the changes Coyote brought were borne of greed, lust, or sheer irrepressible energy -- they occurred by "whim or accident" in the course of perpetual adventures. Literary anthropologist Jarold Ramsey summarizes the trickster's role in prehistory: Coyote "went round the Thompsons' world fixing things up, molding reality to more or less its present shape, and doing all this not out of obedience to a divine plan, but rather out of very mixed, recognizably human motives... In Levi-Strauss's terms, he is a...mediator between the creator and the human race to come."

Adaptable and pragmatic, Coyote is neither good nor evil, but rather, opportunistic. A trickster, he twists and turns conventional expectations, seeking advantage, finding trouble, and "creat(ing) possibility"
on his rule-bending, shape-shifting odyssey. He transgresses social boundaries, and in so doing, brings them into stronger relief. He is neither human nor non-human, but a mediator between the two, both blurring and defining the lines between them. Unkillable, he is “overcharged with biological energy” and procreative drive. He has been here since the beginning, and will be here at the end.

Today, Coyote lives on in the animals that bear his name, in those who have him as their guardian spirit, and in the literature that recounts his adventures on earth. This chapter looks at the latter, specifically two sets of Nlha7kapmx stories: the first a body of stories translated by ethnographer James Teit around the turn of the 19th century; the second a contemporary collection edited by Darwin Hanna and Mamie Henry. To help me interpret them, I draw on the work of William Bright and Jarold Ramsey, who have followed Coyote around for decades. While most of my quotes are from Ramsey, I borrow perspective from Bright, and more specifically a structure, a way of dividing Coyote up into characteristic qualities, such as adaptability and vitality, that reflect both his adventures in prehistory, and his embodiment in *Canis latrans*. Some of these qualities I lift straight from Bright, but most are my own variations. Of course, Coyote is a hard one to pin down. Not only do stories about him change with generations, but the one thing that stays constant in these stories is his elusiveness, his ambiguity. Paint him as a rascal, and he is sure to do a good deed.

**Traveller**

In the stories that are told of him, Coyote is always “travelling around the country,” “walking along” or “roaming about.” Transience is his trademark, although in many stories Coyote also has a lodge, and a family, as well. Sent to the Nlha7kapmx world to “put it right,” Coyote travels to fulfill his mission; he travels to get food, pursue women, or relieve boredom; he travels because it is in his dynamic nature to do so.

Charged with making the world better for the people, Coyote roamed the territories for which he was responsible and impulsively reworked the landscape. He “would make a hill here, a bench or plain there; a rocky bluff here, a grassy slope there; bushes or trees of certain kinds here, and there widen or narrow a
river, make shallow or deep water, make canyons, falls, and rapids; and so on." Coyote's wanderings are embedded in the Nlha7kapmx landscape and preserved in the names of local landmarks, such as boulders and fishing sites. Stand at the Lower Nicola post office, and look up at the bluffs on the south side of the river. The pinnacles you see are hunters, transformed by Coyote into stone and clay. Upriver, at Tezze'la, is "Coyote's Underground Lodge," where he lived for a time with his wives and eight children. His fishing site is "located about six miles above Spence's Bridge, where there are some bars and an island in the river."

Coyote did not live "once upon a time, far, far away..." He travelled over the same ground as his story tellers, a Nlha7kapmx proto-geography made more recognizable by the outcomes of his adventures. In "Nli’ksentem," Coyote goes to Beta’ni with the rest of the people to "hunt deer and pick roots." Beta’ni is about 10 miles west-southwest of Spence's Bridge. Meanwhile, Coyote's son, released from exile in the upper world, is lowered back to earth onto "the top of a large flat stone near what is now the town of Lytton." Teit wrote that "the Nlak-a’pamux hold this stone sacred, and at the present day keep it covered over with earth, so that the whites may not see it." Anxious to reach Beta’ni, Coyote's son crosses the Thompson River in a horsetail canoe, and "ever since that time the plant [has grown] in the river at the same place where he crossed it." Coyote’s adventures take place in an intensely local context.

Nonetheless, his travels were extensive. Teit was told that "he travelled very far toward the south and east, and some say he reached the borders of the earth." Yet his wanderings were largely confined to the regions that his namesake would later inhabit. According to Teit, Coyote was "specially active in the Nlaka-a’pamux, Shuswap, and Okanagan countries. He did not travel, or do any work, in the Coast region...although he went down there two or three times to bring up the salmon. It seems he had nothing to do with transformations along the coast and never interfered with the Transformers there. Neither would he let the Transformers of the coast interfere with, or travel through, his sphere of work." Coyote recognized and (usually) respected ethnic and biogeographical borders and was actively involved in differentiating the landscape. He "gave names to different parts of the country...He also made or defined many, if not all, of the boundaries between tribes. ...Some think Coyote also caused the various tribes to speak different
languages." Although Coyote’s itinerary was spontaneous, his travels gave order and meaning to the landscape. Telling them is a way of mapping out space, explaining ecological features, and teaching the lay of the land through which Coyote perpetually “was going.”

Coyote roamed the hills in order to “set the world right;” and his travels explain and define Nlha7kapmx geography. Yet he also roams because it suits his protean disposition. Coyote is a traveller because he represents possibility, and uncertainty. The prospect of him “coming along” allows for spontaneous reversals and resolutions, it accounts for the impulsive and ingenious turns that complicate life. Like a wild card, Coyote pops up to twist a plot, patch up a mess, complicate a journey, or test the wits of a hero. As Ramsey writes, Coyote “is always ‘coming along,’ ‘going there,’ not in the sense of a purposeful journey from X to Y, of course, but rather in the picaresque sense of being capable of turning up when the narrative needs him.”

Coyote is always in between places. He retains the advantage of mobility, the privilege of shifting as the situation demands.

Transformer

Coyote is not only a transformer of landscapes but a shapeshifter of sorts, remaking himself in response to the jams and crises he perpetually encounters (and often instigates!). Cast into the river, Coyote morphs into a board. Thrown into the fire, he changes from board to crying baby and is saved. After the great flood, “all the people were drowned except the Coyote, who turned himself into a piece of wood.” Likewise, Coyote finds help in the unlikeliest of places. When approaching an unknown monster, he excretes and asks his excrement the stranger’s identity. He sculpts a son out of clay, and when it is dissolved, tries gum. When the gum-boy melts, he tries stone; when stone boy drowns, he tries wood and succeeds. Coyote pieces together props and disguises from available material: a fine suit of clothes from moss or alkali grass, eaglets from dung.

Coyote succeeds by trial and error, he learns from his mistakes, and adapts. Unlike Western deities and heroes, guided by eternal laws and moral purpose, Coyote improvises salvation and reshapes the world impulsively and according to self-interest. According to Ramsey, “both the traditional literature and native
commentary upon it seem to validate... Levi-Strauss’s conception of the Trickster-Transformer as a bricoleur, a sort of mythic handy-man who “cobble” reality in the form of a bricolage out of the available material, and with something distinctly less transcendent than a divine plan or teleology to guide him — namely, his own impressionable, wayward, avid mind.”

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Opportunist

“Given to trying anything,” Coyote embodies the amoral art of survival, the ethics of opportunism. Whenever Coyote encounters a young woman, or a source of wealth, prestige or food, he seizes the opportunity to enrich himself and add to his progeny. In many stories, Coyote wanders from one larder to the next, inserting himself into the lives of their inhabitants, and artfully pursuing his objectives. Approaching the home of the catbird, he concocts a plan to steal his feather robe.32 Visiting his daughter and her husband, he eats all of their meat and their buckskin clothing.33 He finagles a feast with Grizzly Bear by disguising branches and fish skins as berries and salmon.34 Coyote crosses social boundaries to get what he wants.

Coyote’s procreative abilities are the subject of many stories. After the great flood, he “took trees for wives, and the Indians are said to be his descendants.”35 Coyote lusts after women and impregnates them easily. In “Nli’ksentem,” Coyote steals his son’s wife, and later hurls his penis across the Fraser River, into a woman on the opposite bank.36 In the “Story of the Sisters who marry Coyote,” he lures two women into his lodge; one of them becomes pregnant, and bears him four sons. When Coyote loses his eyes, he steals the cat-bird’s eyes for temporary replacements, and places red berries in her sockets (thus cat-birds have red eyes). Wandering in search of his eyeballs, Coyote stumbles upon the lodge of an old, half-blind woman. He prods her for information, and she tells him of her four daughters away “at the village seeing the people playing with Coyote’s eyes.” He shakes out all of her bones, and, wearing her skin, persuades the four young girls to carry “their mother” to town. He impregnates each girl in turn as they lift him onto their backs, and steals his eyes back from the villagers.37
It is his ability to adapt, to piece himself together much as he did the world, that renders Coyote unkillable. Coyote is a survivor, and a pragmatist. However he pursued them to excess, it was to basic ends — food, procreation, bodily integrity, social status — that Coyote’s boundless energy was directed. Likewise, his work in the world involved practical matters. “Coyote taught the people how to eat, how to wear clothes, make houses, hunt, fish, etc.” Coyote’s pragmatism is lauded in the following passage, which compares him favorably to Jesus:

“Jesus worked only for the people’s spiritual benefit...He had tried to induce them to be good, and taught them how to pray to the Chief. He taught them no arts, nor wisdom about how to do things, nor did he help to make life easier for them. Neither did he transform or destroy the evil monsters which killed them, nor did he change or arrange the features of the earth in any way...Now, the Chief said, ‘If matters are not improved, there will soon be no people.’ Then he sent Coyote to earth to destroy all the monsters and evil beings, to make life easier and better for the people, and to teach them the best way to do things.”

Unlike purposeful Western gods, Coyote overcomes by adaptation. His power lies in clever response, in breaching the barriers that block his irrepressible hunger, in shaping a new geography by circumventing the constraints of the old one.

Mediator

Coyote seeks the same things as humans — food, sex, status, survival — because he is part human himself. Coyote, like all sptakwelh, assumes “vaguely human form” and is described in Teit’s collections as a tall thin man with a strange voice. Ramsey calls the trickster “an ambiguous creature who is somehow intermediate between human and non-human.” Roberta Haines writes that the Plateau Coyote “represents the link between worlds: the world populated by plant and animal people and the new world populated by First People; between people and animals; between our higher selves and our craftier earthbound natures.”
As such, he acts as a “courier in the no-man’s land between human and animal,” helping human cultures negotiate their relationship with the natural world while maintaining some sense of distance. Fellow omnivores and generalists, tricksters (like Coyote, Raven, Hare) are our most likely surrogates in the animal realm, yet they are still animals, safely situated on the other side of the species barrier. They can test the waters beyond our ethical turning points and provide (vicarious) amusement and guidance, without sanctioning their indiscretions within human society. Coyote is at home at the moral edges, where the animal and human realms overlap and seek division. These are places where the behavior of animals and the morality of “the people” can be distinguished; and where people can consider their relations with the natural world. Yet to get to this middle ground, Coyote has to cross the boundaries of both. More human than many animals, Coyote not only transgresses moral limits, he also crosses Nature itself. His come­-uppance on both accounts serves a cautionary purpose.

Many Coyote stories concern the treatment of animals, and the ecological limits to greed. In “Coyote and Buffalo,” Buffalo gives Coyote one of his wives as a constant source of food. Coyote can cut meat out of her hip twice a day, with no permanent damage, as long as he smooths over the wound. But Coyote tires of the restriction, and invites Crow and Magpie to partake of his wonderful wife. In a feeding frenzy, they devour the entire animal, and are left with nothing. Similarly, in “Coyote and the Wood Tick,” Coyote gains possession of Wood Tick’s magic staff, which can kill deer when struck on the ground. One strike brings down one deer -- and that is the daily limit. Coyote can’t resist banging the staff more than once, and is buried under a cascade of bodies. The deer stampede off, but not before the quick-thinking Wood Tick hops behind one of their ears. Even the adaptable Coyote must respect ecological limits.

Like Coyote, many tricksters are charged with showing the people “how to live well and build good houses.” Ramsey interprets this as helping people locate “one’s proper station (and therefore one’s identity) in a world of polarized entities like Nature and Society.” He adds: “Tricksters...effect complex mediations whereby human polarities are imaginatively held together and indeed in a fashion integrated -- Nature as
against Society...prehistory as against ‘history,’ and finally, on the level of mythic transformations, what could have been in the world against what is.”

Coyote not only bridges polarities, he personifies them as well. A walking contradiction, Coyote embodies ambiguity. Coyote dies repeatedly but lives forever. He alters the landscape around him, yet transforms himself to better adapt to circumstances. Both wise man and fool, devil and god, Coyote does not reconcile these polarities but sustains them in dynamic tension. “The Coyote was the most powerful in magic, the cleverest, the most cunning, and the wisest of all the ancients. Yet he sometimes made mistakes, and was often selfish, boastful, revengeful, foolish, and licentious. He was the greatest of all transformers, and did many good and beneficial works.” Coyote’s power is in showing what is possible -- the consequences, perhaps, of an unbridled lust for life -- and then, what works.

“The functional essence of the Trickster...lies in his predilection, one might say his genius, for always being in the middle, in all kinds of middles, in muddles” writes Ramsey. The center of controversy, the bone-picker of opposing contentions, Coyote somehow makes his way through every fray. Whether he emerges chagrined or victorious is secondary, the point is that he makes it out alive, with the world “put right” again, either through admonishment or triumph.

Survivor

In “The Ball,” true grief racks Coyote when his sons are killed. He assumes the shape of an elk, armors himself, and, more an angry god than the characteristic trickster, wreaks revenge by trampling the villagers who killed them. But, as always, Coyote’s trick is not foolproof. Villagers send arrows through gaps in his armor, at his throat and rear, creating the white marks seen on coyotes and elk today. Reaching the fallen elk, the villagers see that it has turned to excrement, and hear Coyote laughing in the hills above them, slowly making his way home to his lodge.
Coyote repeatedly cheats death, as part of his trickster pedigree:

"Tricksters ...may suffer bad luck or just retribution in the form of starvation, poisoning, dismemberment, ingestion by monsters, incineration, drowning, fatal falls, and so on -- but, as we would have it, it is a universal convention that they revive...and go blithely on their way. They are mythic survivors, 'hot for the world.'"48

Coyote, in his semi-human form, did leave the earth. The following story tells of his departure, and his inevitable return.

Having finished his work on earth, and having put all things to rights, the time came that the Coyote should meet the Old Man. He was travelling eastward through the country somewhere to the southeast of the Columbia, when he met the Old Man, but did not know that he was the "Great Chief," or "Mystery," because he did not appear to be different from any other old man. The Coyote thought, "This old man does not know who I am. I will astonish him. He knows nothing of my great powers, and of the wonders I have performed." After saluting each other, the Old Man derided the Coyote as a person possessed of small powers; consequently the latter felt annoyed, and began to boast of the many wonders he had performed. The Old Man then said, "If you have performed all those feats, you must indeed be the Coyote, of whom all the people speak, for he alone can do such things." The Coyote said, "Yes, I am he. Why do you doubt my powers?" Whereupon the Old Man answered, "If you are he, and so powerful as you say, remove that river, and make it run yonder." This the Coyote did. Then the Old Man said, "Bring it back;" and the Coyote did so. The Old Man then said, "Place that high mountain on the plain." The Coyote did so, and the Old Man then said, "Replace it where it was;" but this the Coyote could not do, because the Old Man, being the greater in magic of the two,
willed otherwise. The Old Man then asked the Coyote why he could not replace it, and the latter answered, “I don’t know. I suppose because you are greater than I in magic, and therefore make my efforts fruitless.” The Old Man then made the mountain go back to its place. Then, to test the Old Man’s power, the Coyote said, “Remove that river.” The Old Man did so. The Coyote then told him to remove mountain, and he did so, returning each of them to its original position. The Coyote then said, “You must be the Old Man, or the Great Chief. I was looking for you.” The Old Man answered: “I am the Great Chief. Now you have been a long time on earth; and since the world, mostly through your instrumentality, has been put to rights, you have nothing more to do. Soon I am going to leave the earth. You will not return again until I myself do so. You shall then accompany me, and we will change things in the world, and bring back the dead to the land of the living.” The Old Man then made a large house out of ice in a far-away part of the world, and put the Coyote therein to await his coming. He placed inside the house a large log, which should burn forever, and be a fire for the Coyote. No one knows where the Coyote’s house is. He will come again at some future time, and will bring back the Indian dead from the land of shades. 49

Soon afterwards, Old Man turned all the sptakwelh into either humans or animals, depending on whether they were deemed good or bad. Thus the good Coyote people became humans and the bad Coyote people were turned into coyotes. Coyote people had congregated near Spence’s Bridge, and further east. This is why, at least in James Teit’s day, the area was thick with coyotes. 50

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2Teit, Traditions, p. 19. Coyote remade Nlha7kapmx territory, yet his range extends much further. He figures prominently in the traditions of most of Western North America. William Bright calls Coyote “the most important trickster figure of native North America...he dominates native oral literatures of California, Oregon, of the Plateau area inland from the northwest coast, of the Great Basin, of the Southwest, and of the Southern Plains.” William Bright, A Coyote Reader, Berkeley: University of California Press, 1993, p.4.
3Teit, Traditions, p. 19
4Bright, A Coyote Reader, p. xi, 20.
5Teit describes the Old Man as “a kind of superior being” who is “gifted in magic above the power of others....He was also a creator and transformer like the Coyote, and, like him, is expected to return, and to
bring good and happy days for the Indians. So far as I can learn, he was not made an object of prayer, and, like the Coyote, was not held in particular reverence." Teit, Traditions, p. 109.

6Teit, Traditions, p. 19.
8Ramsey, Reading the Fire, p. 174
9Ramsey, Reading the Fire, p. 82.
10Ramsey, Reading the Fire, p. 42
12Teit, Mythology, p. 295
13Teit, Mythology, p. 296
14Teit, Mythology, p. 305
15Teit, Mythology, p. 313
16Teit, Mythology, p. 296
17Teit, Traditions, p. 24
18Teit, Traditions, p. 25
19Teit, Traditions, p. 104, note 57
20Teit, Traditions, p. 25
21Teit, Mythology, p. 295
23Teit, Mythology, p. 296
24Ramsey, Reading the Fire, p. 27
25Teit, Traditions, p. 27
26Teit, Traditions, p. 20
27Teit, Traditions, p. 30
28Hanna and Henry, Our Tellings, p. 36
29Teit, Traditions, p. 21
30Teit, Traditions, p. 21
31Ramsey, Reading the Fire, p. 41
32Teit, Mythology, p. 306
33Hanna and Henry, Our Tellings, p. 56
34Teit, Mythology, p. 312
35Teit, Traditions, p. 20
36Teit, Traditions, p. 21, 28
37Teit, Mythology, p. 309
38Ramsey, Reading the Fire, p. 41
39Ramsey, Reading the Fire, p. 174
40Hanna and Henry, Our Tellings, p. 21
42Hanna and Henry, Our Tellings, p. 49
43Hanna and Henry, Our Tellings, p. 53. See also Teit, Mythology, p.206 and p.211 In an earlier Upper Thompson version of this story, Xaxa, a mysterious magical person, owns the staff. See Teit, Mythology, p. 312.
44Ramsey, Reading the Fire, p. 43

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The unpredictable trickster is also held responsible for bad weather. When it gets cold “the dog of a Coyote has rolled over” to warm his other side by the fire; when Coyote urinates, it rains.
CHAPTER 2

CANIS LATRANS

"The 'mythic' Coyote and the 'biological' Coyote are not two different things: they are two manifestations of a single identity."

Since the close of the sptakwelh period in Nlha7kapmx territory, humans and animals have lived in the landscape Coyote left behind: rolling terraces punctuated with rocky outcrops; sage-steppe grasslands ribboned with willow-lined streams; hillsides clothed in Ponderosa pine; high valleys filled with wildflowers and berries in summer. Across these meadows and terraces, occasionally, a wild dog will saunter. Mostly gray, resembling a small wolf with a bushy tail and pointy nose, this is Coyote's agent in the animal world.

Coyotes have lived in this dry finger of grassland, extending northwest from the Columbia Plateau, for millennia. Yet to describe them I use a model developed only recently, by newcomers to this continent: Canis latrans, the "barking dog," a product of Western science. This perspective seeks an objective understanding of coyotes; it sharpens its focus on quantifiable information and lets questions of character blur. Science constructs a rather stripped down, neutral coyote, a composite of sometimes conflicting data - and an animal defined largely by research relevant to economic concerns, particularly livestock and ungulate predation. Nevertheless, Canis latrans rarely contradicts the character traits described in Coyote stories. This chapter will look at Canis latrans, especially where it intersects with Coyote, to consider the basic habits and behavior of the animal found somewhere in between.

Physical characteristics

Coyotes look like small wolves but have significant physical differences that allow greater adaptability and reflect their omnivorous, less specialized habits. Their fur is grizzled gray; they have large, forward-facing (yet movable) ears, yellow eyes, and a pointed muzzle. Their legs are long, and their bushy tails are held low when they run. They are much smaller than wolves, weighing on average 20-25 pounds and measuring about a metre in length, plus another 35 centimetres of tail. Coyotes have narrower jaws than wolves, and an undeveloped sagittal crest, which indicates weaker jaw muscles. Their molars are more
adapted to chewing, their canine teeth are relatively longer and thinner, and their incisors are much smaller. Lacking the “great grasping power” of wolves, coyotes have difficulty seizing and taking down large prey, such as deer and elk, although two or more may be successful in doing so. Generally they rely on smaller prey and carrion, and make greater use of plants in their diet. This in turn gives them more flexibility in choosing habitat and in finding food in times of dearth.

Other physical attributes help coyotes adapt and survive. All three senses -- sight, hearing and smell -- are developed to an acuity uncommon in most other animals. Coyotes are also fast runners (up to 40mph) with remarkable stamina. They are good swimmers, and can readily cross rivers to reach a food source. Biologist Stanley Young cites many examples of coyote swimming abilities, including coyotes crossing Colorado’s Green River with lambs in their mouths, and swimming the Columbia River, at a spot where it is a half-mile wide, in order to “raid poultry roosts.”

Traveller
Coyotes spend their waking hours on the move, scouting runways (hunting routes) or adjacent areas for food. Most coyotes are not territorial, but hunt within their own home ranges, which have undefended boundaries and may overlap the home ranges of other animals. The size of their home ranges and the length of their daily travels vary with food availability, and are influenced by a number of factors, including population density and seasonal changes. Perhaps the most important determinant is social status.

Coyotes have a flexible social structure, which includes both resident pairs and transient individuals. The mated pair, and their young of the year, form the basic social unit among coyotes. This pair may stay together for several seasons, or for life, but most pups will leave when they are between 6 and 10 months old. Unlike wolves, coyotes only occasionally form “packs,” primarily in areas where ungulates are their main food source. Many coyote packs are temporary arrangements, composed of late-dispersing young and their parents, or loose assemblages of non-mating individuals and transients.
Resident coyotes have stable home ranges with consistent boundaries. These home ranges are small, especially in areas of food abundance. Resident home ranges are defined by den sites, which are only used in breeding season. Biologist D. Pyrah calls these den sites “traditional, both from the aspect of coyote behavior and geographical areas occupied. Coyotes occupying den areas during summer account for most of the coyotes on a particular area of land.”

Transients, on the other hand, have large, loosely defined home ranges which may encompass those of other coyotes. In a Fraser Valley study, “M3,” an adult male coyote, “travelled through a known area of 219.7 km$^2$ over 437 days” which included the home ranges of other study participants. In comparison, resident home ranges were roughly 10 km$^2$. Transients are coyotes who, for reasons of age, physical ability, or circumstance, are unmated and displaced from their former homes. They are generally solitary, although they may form loose, temporary associations. Transients are sometimes elderly coyotes, but most often they are dispersing juveniles.

In the autumn, juveniles leave their families to find new territories and a mate before the breeding season. Some youths may break away as early as August, but many stay much later. Noted coyote biologist H. T. Gier calls November and December “the months for wandering.” Dispersing juveniles may travel several hundred kilometers, depending on densities and food availability, and their direction of travel “may be either random or unidirectional.” Dispersal distances in Alberta and Minnesota averaged 28-31 km and 48 km respectively.

As they roam unfamiliar areas, transient coyotes, especially the unseasoned young, are more apt to starve or fall prey to mishaps. The dispersers that do survive do so by adjusting to their new surroundings and searching for advantage -- food, mates, and denning spots -- effectively. These coyotes, the wandering young and rambling elders, best reflect Coyote’s itinerant ways, opportunism, and propensity for trouble.

Over the past two centuries, transient coyotes have found much suitable habitat. Their travels have been extensive, and have brought their species into every corner of North America. The only sizable predator to
expand its range following European occupation, *Canis latrans* has walked backward through the frontier myth of wildlife extinction. Ironically, persecution may have helped extend coyote range, as dispersal distances appear to increase in populations subject to intensive predator control.\(^{15}\) What likely helped them most, however, was their adaptability.

**Opportunist**

*Canis latrans* is a generalist, able to make use of a range of food sources and habitats, and capable of adjusting to varying circumstances. Coyotes are noted for their ability to learn from experience and renowned for outmaneuvering both prey and enemies, including humans. Their adaptability also extends into the reproductive realm, allowing them to respond positively to population stress. Coyotes have “managed to increase in numbers and expand ranges while less adaptable species struggle within a changing world.”\(^{16}\)

Coyotes are primarily carnivores but will eat “anything [they] can chew.”\(^{17}\) In most places, rodents and lagomorphs (rabbits) comprise the bulk of their diets. Large hoofed mammals, particularly vulnerable newborns and scavenged carcasses, are important food sources, especially in more northern environments. Coyotes also eat other mammals, insects, reptiles and amphibians, all manner of birds, and fish when the opportunity arises. Coyotes supplement their diets with vegetable matter, eating fruit in the summer and fall, and grass throughout the year.\(^{18}\)

In 1934-5, wildlife ecologist Olaus Murie analyzed coyote scat in the B.C. interior. He found that snowshoe hares made up 69% of coyote scats, small mammals, birds, and domestic animals each contributed 7% (although 88% of the latter was consumed as carrion), deer represented 5%, and vegetation less than 2%. He also found a 6” piece of wire.\(^{19}\)

Coyote diets vary both seasonally and geographically. A recent Fraser Valley study found coyotes relied more heavily on livestock in the spring and summer, when lambs and calves are born, vole populations are least available, and extra food is needed for their pups. In the winter, when tall grasses wither, and winter
floods concentrate voles in smaller areas, coyotes turned to the small rodents, then left “high and dry.” In this study, voles made up 70% of the coyote diet, vegetation 10%, rabbits 8%, other mammals, (opossum, raccoon, deer and muskrat) 5%, domestic animals 4%, and passerine birds 2%. Plastic, cloth, rubber, and paper made up the remainder.

A few kilometres away, in the city of Vancouver, coyotes supplement their diets with cats, small dogs, and garbage. A recent study found that small mammals comprised only 15% of their diet, as did dogs and cats, and that grass and fruit contributed 35% of scat and stomach contents. There are a few things coyotes eschew, including skunks and toads, but their food requirements can be satisfied in any terrestrial environment.

Coyote foraging strategies are similarly flexible. Coyotes hunt and they scavenge. Although they favor fresh meat, coyotes will generally eat what is easiest to obtain, as evidenced by the preponderance of carrion in their diets and the concentrations of coyotes to be found at carcass piles behind factory farms. Coyotes hunt alone, in concert with other coyotes, and sometimes with the help of badgers. They may also follow cattle, elk, or heavy machinery as they move through fields, and pounce on rodents as they are flushed from cover. Coyotes are nocturnal, crepuscular, or daytime hunters depending on the habits of their favorite prey. Coyotes in the Fraser Valley, who fed mainly on nocturnal voles, were found to travel mainly at night. Their nocturnal habits may allow them better access to sheep left outside overnight.

Murie offers a useful summary of coyote feeding habits:

"...(U)sually (the coyote) seeks an abundant animal form, whose habits are such that it lends itself to easy capture on a scale large enough to furnish a staple food supply; it is alert for any opportunity to pick up other species, vertebrate or invertebrate; and it seeks the areas of big game concentrations, especially in winter, on the chance of carrion, or the chance of finding an animal at a disadvantage. From the economic standpoint, it can be expected that when livestock become easily available...the coyote readily takes advantage"
of the opportunity....Therefore the subject of coyote food habits becomes a local problem...depending on the local ecological picture."^26

Unlike wolves, who require large prey to feed the pack, coyotes can pick up a meal anywhere. Their "catholic tastes"^27 have carried them everywhere -- from back alleys to boreal forest -- and have rendered them less vulnerable to seasonal fluctuations in food sources. They have also helped coyotes endure disabilities. Young describes several coyotes whose lower jaws had been shot apart. While their wounds healed, they survived on insects and small scraps that could be swallowed whole. Other coyotes, who had lost one or more limbs in traps, hopped on two legs after prey and made a successful living.^28 Beyond flexible food habits, coyotes display a profound knack -- if not compulsion -- for survival.

Transformer

This talent extends into the realm of reproduction. There is much evidence that coyote birth rates, and the sex ratio of pups, vary according to population density. Studies conducted in Texas and Wyoming show that populations subject to predator control or experimental removal produced almost twice the number of pups as undisturbed populations.^29 The same Texas study reported a 50/50 male-female sex ratio among pups in the undisturbed coyote population, and a 40/60 ratio in the high mortality regime.^30

Although coyotes on average produce "near equal" numbers of males and females, scientists suspect that high density populations produce more males, and "reduced density" populations produce more females in order to stimulate higher birth rates.^31 Similarly, more female juveniles ovulate in their first year if environmental conditions (such as density and food availability) are good or if persecution is high.^32 Average litter sizes are 5 to 7 pups, and litters of 9-12 pups are "not uncommon" in areas of high food availability.^33 Poor nutrition, whether caused by high densities, low food availability, climatic conditions, disease, or social causes, reduces the number of ova produced and results in smaller litters. Thus the systematic killing of members of healthy coyote populations can stimulate higher birth rates, and rising numbers.
Neoteny

Coyotes are neotenal, meaning that the young stay with their parents for a relatively long period. Naturalist Hope Ryden describes neoteny as "a characteristic of all species that have not inherited a fixed repertory of behavior, but must learn how to survive...The neotenal coyote...meets change by learning new responses and is therefore capable of developing a whole new lifestyle."\(^{34}\) Coyotes usually stay with their parents for at least six months after they are born, leaving only in time to find mates and new territory before the breeding season.\(^{35}\) Many juveniles stay with their families beyond the birth of the following year's young.

In late spring, when they are about one month old, coyotes learn basic motor and communication skills. They then learn how to hunt, starting with insects, and gradually progressing to larger prey. As summer begins, the family abandons its den and the young develop their skills in a larger, more challenging context, and often in transit.\(^{36}\) As summer progresses, parents may leave their young at selected "rendezvous sites," returning hours later to a chorus of howls. The juveniles play, practice their hunting skills, and may make short forays away from the site during their parents' absence.\(^{37}\) Late in summer, the young may accompany their parents on longer hunting trips.\(^{38}\)

The education of a coyote does not stop at dispersal; rather, their neotenal beginnings foster the adult coyote's trademark ability to learn and adapt. "Coyotes think about things," said Dr. Russell Mason, a Federal wildlife expert in Utah. "A coyote only needs to be shown something once."\(^{39}\)

Coyotes are especially noted for their skill in sabotaging the means of their destruction. Their keen minds and senses help them to detect traps, avoid poison, and release themselves from any number of predicaments. Coyote researcher Dr. Robert Crabtree recalls a Washington State coyote he tried to trap for four years (unsuccessfully): "He would do things like dig up my trap and flip it over, unsprung. One time, he scraped the dirt off and defecated on it without springing it." The coyote also avoided a net, dropped from a helicopter, by hiding under a bush.\(^{40}\)
Coyotes are in many ways “in-between” animals, in terms of size, behavior, survival strategies, geography, and position within ecological hierarchies. Within the food chain, they occupy a narrow space between top predators and mesopredators. Within their family, *Canidae*, they are intermediate between wolves and foxes, possessing characteristics of both. Larger than foxes and smaller than wolves, coyotes have the narrow snout and shoulders of the former and the long legs and coat of the latter. They are less social than wolves, forgoing a formal pack structure, and more social than foxes, who hunt alone and never form packs.  

Coyotes dominate and may kill foxes, and in turn are dominated by wolves. Their home ranges accommodate the territory of wolves, and restrict the movements of foxes. Coyotes eat everything foxes eat, and everything wolves eat, although they are less successful in obtaining large ungulates. While foxes and wolves have branched off from the earliest, unspecialized form of *Canis*, coyotes have held the middle ground. 

Coyotes have evolved alongside a succession of larger, more specialized canids (such as wolves) who have exerted constant selective pressure on them, who have chased them out of their territory and who have killed them for getting too close. Coyotes do best in areas unoccupied by wolves. When they do live with wolves, they occupy the borderlands between wolf packs, and make the most of the foraging opportunities their neighbors provide. Wolf kills are a meal ticket for coyotes who can get close enough to snatch a few bites. Consequently, coyotes follow wolves, they skirt around the edges and scavenge from them. Coyotes have evolved in the spaces between wolf packs, and in the spaces within wolf territories that are at any given time unguarded, unnoticed. For them, trespass is a winning ecological strategy. 

Coyotes similarly limit populations of foxes, “who are apparently restricted to gaps in coyote home ranges.” Foxes often live in riparian corridors or lake shores, which form the boundaries of coyote territories. Coyote-fox conflict is not a universal given. A Kansas study found “coyotes, red foxes, and gray foxes...all present within a single ravine with no evidence of [conflict] between them.” It seems that
coyotes' place between wolves and foxes is permeable on both sides. Coyotes cross the boundaries of wolf territories, and they allow their own spaces to be breached.

Coyotes also restrict bobcat populations, who have a lower birth rate and less success in obtaining prey. Coyote predation on foxes, bobcats, and other mesopredators such as raccoons and housecats, produces a cascade of effects down the food chain. Coyotes mediate the relationship between mesopredators and their prey, which can be beneficial, for instance, to songbird populations. Coyote predation on foxes and bobcats may also release populations, such as martens and fishers, "that may be behaviorally or ecologically subordinate to foxes or bobcats." Conversely, "when coyotes are selectively eliminated from an area, (smaller) predators take their place." 

However, the elimination of coyotes has been difficult to achieve. "The only contractions of coyote range within historical times," writes Gier, "are local and temporary" and were caused by intensive persecution. Their comfort in restricted space and their talent for transgression help coyotes thrive in hostile human environments. Gier writes that coyotes "have adapted to scavenging from humans, even within a few meters of a farmhouse, as they formerly scavenged from wolves."

Survivor

Like Coyote, coyotes experience high mortality but as a species are seemingly indestructible. After 100 years of intensive efforts to exterminate them, North Americans find themselves surrounded by coyotes. According to researchers, "the overkill of the past has only transformed the coyote into a more adaptable, more prolific creature, maybe even an indestructible species." 

Their unspecialized pedigree has rendered coyotes supremely adaptable. Their omnivorous diets allow them to survive in times of dearth and to occupy any habitat. Their neotenal upbringings help them to learn from mistakes, to devise hunting strategies, and to recognize danger. Their density-dependent birth rates allow them to outpace slaughter. A coyote population can maintain itself and even increase its numbers
except at the very highest levels of mortality. One population model estimated that if 75% of the coyotes were killed each year, it would take 50 years to exterminate them.\textsuperscript{52}

Coyotes' social geography also adds to their resilience. Breeding pairs, with stable home ranges, are not the ones most often killed. Most coyotes killed are dispersing juveniles making their way around unfamiliar territory. These unseasoned coyotes are also more vulnerable to predation and starvation, and as such have a high mortality rate regardless of human persecution. Killing them is largely compensatory.\textsuperscript{53} It serves mainly to reduce coyote density and competition for prey, and therefore enhance the older and more established population's reproductive success. If residents are killed, transients serve as ready replacements, quickly assuming their home ranges, denning sites, and runways. Once established, these younger coyotes are likely to produce larger litters than their senior counterparts.

While juvenile dispersers are more vulnerable to bounty hunters and poison baits, their migration -- and their deaths -- "confound attempts to manage coyote populations intensively in localized areas."\textsuperscript{54} Collectively, through the travels and misadventures of the young, and the wiles and procreative drive of residents, coyotes die repeatedly, yet remain unkillable.

Coyotes are survivors in an evolutionary sense, as well. Coyotes resemble the oldest, most generalized form of \textit{Canis}, which lived in the Americas nearly 60 million years ago (mya). \textit{Canis latrans} is believed to have developed around 3 mya, with a larger braincase and smaller sagittal crest than its precursor.\textsuperscript{55} Coyotes are "considered part of the same central stock of unspecialized canids that has formed the basis of the evolution of the family Canidae....[They] seem to have maintained themselves with relatively little change, while the canids that became large, and specialized in habits, have disappeared. The [prehistoric] bear-dogs...the hyena-dogs...and the great dire wolf...have all fallen by the wayside. Now even the gray and red wolves may be moving in this same direction, but the coyote shows no sign of becoming a has-been."\textsuperscript{56}
Coyotes have a long history on this continent, and that is the point I want to make now: coyotes have histories, although this chapter, and much of the scientific and popular literature, treats them ahistorically. Like anyone else, coyotes operate within local temporal and spatial contexts; they are individuals, with forebears and descendants, and with life histories of their own. A coyote living in late 20th century Los Angeles is much different from a coyote that lived on the 18th century buffalo commons, and different again from a coyote living in present day Jasper National Park. Placing coyotes in context is especially important given the species' adaptability, the persecution they have endured over the last two centuries, and the landscape changes they have encountered. Gier contends that persecution has augmented natural selection such that coyotes “are now larger, smarter, more adaptable, faster, and more cunning than when white men first entered the coyote’s territory.”57

In the last few pages I have roughed out a sketch of coyote biology and behavior, using research from the past 50 years. Like a bad forensic drawing, this composite resembles no single individual; it is ahistorical and only of general use in imagining past coyote experience. The remaining chapters place coyotes within historical and geographic context, but coyotes, as individuals, remain elusive.

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3Canis latrans was coined in 1823 when Thomas Say, the “father of American zoology,” encountered coyotes during Long’s expedition to the Rocky Mountains. The model has evolved since then, most rapidly in the last half of the 20th century, with an increase in studies of the animal. See Young and Jackson, The Clever Coyote, p. 5.
4Male coyotes are consistently 10-20% larger than female coyotes. Parker, Eastern Coyote, p. 38.
6Young and Jackson, The Clever Coyote, p. 241.
8Young and Jackson, The Clever Coyote, p. 58.
9A territory is defined as “the area that an individual or group occupies to the almost complete exclusion of other animals of the same species and that it will actively defend against them.” Coyotes living in packs may be territorial. Pack formation usually occurs in areas where ungulates are the primary food source, and coyotes must band together to bring down prey. Coyotes in packs exhibit many social characteristics of wolves, including hierarchical social organization. Marc Bekoff and M.C. Wells, “The Social Ecology of Coyotes,” Scientific American 242 (1980) p. 136.
14 Parker, Eastern Coyote, p.76.
16 Parker, Eastern Coyote, p. 43.
19 Olaus J. Murie, “Notes on Coyote Food Habits in Montana and British Columbia, Journal of Mammalogy 26(1) p. 34.
23 Dennis Pemble, personal communication, February 12, 1999.
28 Young & Jackson, The Clever Coyote, p. 100-104.
29 Parker, Eastern Coyote, p. 68.
30 Parker, Eastern Coyote, p.86-7.
31 More female pups increases the probability of maximum fecundity the following year. Juvenile females experience higher mortality than males, and most do not breed in their first year. See Parker, Eastern Coyote, p 63.
33 Parker, Eastern Coyote, p. 67.
35 Parker, Eastern Coyote, p. 75.
37 Parker, Eastern Coyote, p. 75.
38 Coyote fathers may or may not participate in late summer training. See Parker, Eastern Coyote, p.74-5.
40 ibid.
45 Litvaitis, “Niche Relations,” p. 77-80. For information on bobcat and fox interactions see also Young & Jackson, The Clever Coyote, p. 93.
51 Bauer, Wild Dogs, p. 54. Bauer cites research by Dr. Robert Crabtree at Montana State University.
53 In an Alberta study, 68% of juveniles died in the first year. A second study showed mortality rates of 71% for juveniles as opposed to 36%-42% for adults. See Parker, Eastern Coyote, p. 89-91.
CHAPTER 3

COYOTES UPRIVER

In 1808, Coyote passed again through Nlha7kapmx territory. He floated down the river in a bark canoe, with Sun, Moon, Morning-Star, the transformer Kokwe’la, Nmuipem (diver), and Skwiaxenemux (arrow armed person). Chief Imentcu’ten hailed the party near present-day Lytton and the men spent the night on shore, among many Nlha7kapmx who had come from as far as K’kemtsin (Spence’s Bridge) to see them. Imentcu’ten gave the group salmon, berries, oil, and roots, and its leader, “the Sun,” exchanged beads, knives, and tobacco. Coyote and his companions left the next day, but returned a few weeks later, when the salmon were running. They continued upriver and were not seen again.

The Sun was also known as Simon Fraser, the first white man to navigate the river that would, in a few years, bear his name. Coyote was a member of his crew. Fraser was a partner in the North West Company, the Hudson’s Bay Company’s rival in the North American fur trade. In 1805, he crossed the Rocky Mountains with two intentions: to extend the company’s prairie operations westward; and to establish overland access to the Pacific coast sea otter trade, which American traders had recently dominated. The forts and trade routes he established constituted a British claim to lands vulnerable to American expansionism. As such Fraser was an agent of both his own company’s interests and the British Empire.

Within 20 years, the Hudson’s Bay Company (which merged with the North West Company in 1821), would control fur trade operations from the Columbia River to the Yukon. Its trading posts became new centres of economic and social activity in native territories, and new loci of power that would alter intertribal relations. Yet the Empire’s colonial aspirations would produce more enduring changes, as the region’s strategic importance and mineral wealth grew more apparent. Many Nlha7kapmx who saw Sun and Coyote at Lytton thought the visit “foreboded some great change or events of prime importance to the Indians,” and they were right.
In mythological times, Coyote floated down the Fraser River, and returned with salmon running behind him -- and behind them, clouds of “smoke wasps, blow flies, salmon flies, and meat bugs.” Five decades after Coyote canoed downstream with Simon Fraser, gold was discovered in Nlha7kapmx territory, and new curses ascended the river: many thousands of strangers hungry for riches; a second smallpox epidemic, and a colonial juggernaut that would rob the Nlha7kapmx of their land.

With colonization, Nlha7kapmx territory became a contested world: It was a land owned by the Nlha7kapmx, a place “storied and enhanced” by their lengthy tenure, but it was also a district controlled by whites who brought their own stories to bear on the landscape. Settlers carved a new geography into Coyote’s terraces and hills; they measured property and fenced land, they ploughed fields and grazed cattle; they built wagon roads and later, a rail road.

Within this fractured environment, coyotes became different creatures. Traditionally, Nlha7kapmx coyotes were providers of meat, skins and fur, and the embodiment of Coyote. Later they became bounty cheques in hard times, and pests to those who took up ranching. Settler coyotes were vermin, menacing presences, or objects of sport. Written out of their role as grassland animals, and into the role of intruders, they were persecuted and driven from their former home ranges. Yet, even as they were restricted in new ways, rail lines and roads encouraged them to seek new ground. To explore the divergence, and convergence, of these different coyotes, this chapter pivots around two texts, both written along the Thompson River, about 30 km apart, in the last decade of the 19th century.

The first is James Teit’s *The Thompson Indians of British Columbia*, which provides a wealth of information on Nlha7kapmx relationships with animals, including coyotes. Produced for the anthropologist Franz Boas, *The Thompson Indians* is the only major ethnographic work on the Nlha7kapmx. It is comprehensive and detailed, especially for the standards of the time, yet the material is difficult to put into historical context. Produced from 1894-1900, *The Thompson Indians* is, according to ethnographer Wendy Wickwire, “a descriptive account set in a time period long past. Teit interviewed the most elderly people about their memories of an earlier way of life. As with standard Boasian texts, there are
no names, actions, or words of specific individuals. The world of *The Thompson Indians* is the world of the collective group." The *Thompson Indians* must also be seen as a cross-cultural artifact, the product of both Teit and his Nlha7kapmx informants. The traditions recorded by Teit and recounted here can be only approximately situated within late 19th century Nlha7kapmx life.

The second text is Clement Francis Cornwall’s *The Story of the Coyote Hounds, 1868-1888*, an unpublished reminiscence of a wealthy British settler in Nlha7kapmx territory. Cornwall’s story is a more personal treatment than Teit’s ethnography, but it also serves as a springboard for broader investigation. I use it to examine British hunting ethics and explore how class influenced settler attitudes toward predators and hunting. Cornwall was prominent in provincial and national politics, and his values, and those of fellow “squire-sportsmen” helped shape later game management policy. In this way, Cornwall’s writings, although retrospective, offer a preview of sorts. Like *The Thompson Indians*, Cornwall’s *Coyote Hounds* helps us survey a broad and changing territory.

**Coyotes and the Nlha7kapmx**

As Coyote occupied Nlha7kapmx stories and traditions, his namesakes provided skin, fur, and meat for the people’s well-being. The Nlha7kapmx hunted coyotes for subsistence and ceremonial uses, and occasionally for trade. Although Teit does not record any such practice, the Nlha7kapmx may also have killed coyotes who made off with trapped animals or meat caches, much as other North American tribes killed wolves. Coyotes were hunted and snared, but most often taken by “digging or smoking them out of their holes” during denning season.

Although the Nlha7kapmx made most “clothing, beddings, bags, etc.” from deer and elk, the skins of coyote, among other animals, were also popular. Nlha7kapmx mothers filled their baby carriers with coyote fur, and wealthy people may have owned a coyote robe. The Nlha7kapmx also made quivers out of coyote skins, “with the hair left on (and) the tails forming an ornament at the lower end.”
Those who counted Coyote as their guardian spirit wore coyote skins as ponchos, with the head in front and the tail behind. They made headbands from coyote tails or hides and decorated them with red ochre, or tied the ends of their braids with a long, narrow strip of coyote skin. At the time of Teit’s reporting, men trimmed long buckskin coats with coyote fur. Coyotes were among the favorite guardian spirits of (male) shamans and hunters, but not of warriors, fishermen, gamblers, or runners.

Coyote skins were not traditional trade items, although the Nlha7kapmx may have sold small numbers to the Hudson’s Bay Company (HBC) at Fort Yale or Kamloops, or to HBC employees who visited Spence’s Bridge. Often called “cased wolves,” after the manner in which they were skinned, coyotes “were considered to have no value” in the world market until about 1860, when beaver became increasingly scarce. Until the 1920’s, however, coyotes were of minor importance as a fur bearer. The quality of their skins was generally “stagy” or unprime, and they commanded lower prices than wolf pelts.

Coyote meat, along with that of plover, ptarmigan, red-winged flicker, and robin, was only eaten by the elderly. All people were “forbidden to eat coyote-liver,” as this “would cause a swelling of the face or eyes.” The Nlha7kapmx may have avoided coyote meat because of the animal’s largely carnivorous diet. Nature writer Barry Lopez claims that “most native Americans avoided eating wolf meat because it was the meat of a meat eater, not a plant eater.” Wolf meat was considered “inadequate,” as it lacked the medicinal influence of herbs and plants.

Coyotes may have been the ancestor of Nlha7kapmx dogs. Much evidence — and speculation — suggests that pre-contact “Indian dogs” were actually “partially domesticated coyotes, somewhat modified by selection.” The 19th-century naturalist J.K. Lord insisted that “the dog, indigenous to British Columbia, is nothing more than a tamed cayote.” Oliver Wells, (1907-1970) a later resident of the eastern Fraser Valley, also considered coyotes to be “the ancestor of the Native dog bred and kept by (the) Chilliwack tribe.”
Teit mentions that “the dogs of the Thompson Indians resembled in appearance the coyote,” but “through interbreeding with the dogs introduced by the whites, they have become totally extinct.” The Dog in *sptakwelh* stories is a powerful and loyal ally, but quite distinct from Coyote. Coyote owns a dog in “Cukata’na, or the Coyote’s Dog.” In “Coyote’s Daughters and their Dogs,” the latter are actually Grizzly Bear and Rattlesnake. In these cases, “dog” indicates a relationship, much like “husband” or “grandmother,” rather than a well-defined character. Nlha7kapmx dogs, while genetically similar to coyotes, might have been quite different creatures.

The term “coyote” was used both as a formal name and an insult. Teit gives “Coyote-head,” as an example of a man’s name. (The suffix “-head” was one of the three most common for men’s names among the Upper Thompson.) The name “coyote” also described a boastful person, as the following passage illustrates: “People will dislike you and laugh at you if you cannot do what you say.... People will call you “coyote” or will say you are “proud of yourself,” or ‘vain.’”

Like many animals, coyotes had mysterious powers and spiritual standing, and various observances were required to co-exist with them. The husband of a pregnant woman was forbidden to “hunt or snare” coyotes, among other animals. Coyote howls could be a bad omen: “The crying of a coyote night after night close to a dwelling, and in a peculiar manner,” Teit was told, “foretells the death of an inmate of the house, or of some friend in another place.” In winter, children were cautioned against mentioning coyotes lest Coyote in his ice house turn over and cause bad weather.

Coyotes were of practical and spiritual value to the Nlha7kapmx, and these two aspects were deeply entangled. It is this dimension of the Nlha7kapmx relationship with animals that most distinguishes it from settler attitudes. The Nlha7kapmx recognized in animals a deeper agency, fuller lives, and a soul. Animals were not equal. Their powers were differentiated by species and individual abilities. Nor were they of a kind with humans. They were killed for trade and sustenance, and their deaths were seldom “cruelty free.” Their roles, as animals, were less fortunate than those of humans, yet they lacked nothing in spiritual
power. In Nlha7kapmx society, coyotes were “sacred beings” who were “central to everyday life and religious beliefs.”

Animals could come, and bring abundance; or go, and cause starvation. This decision would be arbitrated by the amount of respect that humans showed them. Teit described

“a current belief ...that certain animals have worlds of their own, which are situated underground, and the entrances to which are hidden. Animals are born there, and consequently are very numerous in those worlds. They wander out into our world; and some of them are born, live, and die in it, but many of them go back to their own world at times. Then these animals are scarce in this world for a time....Animals wander around in this world to benefit mankind; but as soon as the Indian ill-uses them, or does not need them, they return home.”

The spiritual agency of the animal largely determined the outcome of the hunt. According to Teit’s informants, “every person and animal has a time set when it must die, and ... nothing can kill it if its time has not come. If a good shot misses a deer at close range, [then] the deer’s time for dying had not come, therefore it could not be killed. When a deer acts foolishly, and walks, as it were, into the jaws of death, it is said that its time has come and it wants to die.” Hunting was a gift, not a purchase; a privilege, not a right. The hunter did not “best” his quarry; he solicited its active cooperation.

Teit does not describe the hunting of coyotes, or any observances the Nlha7kapmx may have made when doing so, but his discussion of Nlha7kapmx deer and bear hunting surely applies. Teit noted that these hunters sought communication with their quarry, and asked them to volunteer their lives for the good of the people. They purified their bodies and made ritual preparations before the hunt. A hunter learned that he should not “talk lightly, or make fun, of any animal he intends to hunt or trap. He should talk to it and of it respectfully, and always say, ‘I may kill it,’ not ‘I shall kill it,’” lest the animals overhear and avoid him. To supplement the hunters’ efforts, Nlha7kapmx shamans “made supplication” in times of scarcity. After
the hunt, participants would thank the animal, pray and sing for it, and handle any remains with respect. Animals not so honored could cause their relatives to take umbrage and leave, with hunger the result; offended animals could also cause negligent hunters to fall ill.41

The Nlha7kapmx depended on the bodies of wild animals for subsistence, for ceremonial purposes, and for trade. Those bodies were run by spiritual players who arbitrated the outcome of the hunt. Hunters cultivated their relationships with these powers so that animals would be supplied. Hunters also sought direct supernatural power over animals, chewing on deer sinew to make a wounded deer's muscles seize up, and prevent it from travelling far.42 To gain the concession of their bodies, Nlha7kapmx hunters dealt in the realm of the animal's power; they made amends in the realm of the spirit. To take coyotes, they had to come to terms with Coyote.
Cornwall’s “Cayotes”

British immigrants to B.C. may have appreciated wild animals aesthetically, and learned something about their own souls in hunting them, but few courted their spirits, or allowed them powers outside of their physical abilities. Conquest, not supplication, was the prevailing ethos. Animals were food for the pot, skins for barter, or vehicles for the betterment of character.

Clement Francis Cornwall sought the latter. Cornwall came to Nlha7kapmx territory in 1862, along with his brother Henry. Both Cambridge graduates, and sons of “untitled nobility,” they set up a ranch in the northeast limits of Nlha7kapmx territory, and named it “Ashcroft” after their home in Gloucester. Although the immigrant population was growing, men of Cornwall’s station were few and far between. He quickly rose to prominence, representing Hope-Yale-Lytton districts in the first Legislative Assembly in 1864, and remaining there until appointed to the Canadian Senate following confederation. In 1881, he accepted the Lieutenant Governorship of B.C. In the meantime, he, and his brother, had become “the largest and most successful stock raiser(s) in the province.”

Cornwall was raised in the fox hunting tradition, and he carried his enthusiasm for “field sports” to Ashcroft. There were few foxes in the area, but his first glimpse of a coyote produced an unlikely surrogate. “I think that the very first time we saw ‘Cayotes’ about,” he writes, “we made up our minds that they would show sport before foxhounds.”

In this regard, Cornwall found many qualities to commend in coyotes:

The ‘Cayote’ makes an excellent beast of chase. Whatever he may be in warmer and more enervating climates...where he is described as being a slinking disreputable rascal such are decidedly not his characteristics here. Here he is gay, sprightly, and plucky, large in size...though by no means heavy -- carries a good bright coat and brush, is always to be found and always ready to give hounds all they can do to catch him. ....When
pressed at all he runs very straight...but when hounds can’t go the pace he plays all manner of tricks.....On the whole I think he shows better sport than a fox.  

Cornwall liked coyotes because they ran well before hounds. He also found them aesthetically pleasing. “I always like seeing coyotes about,” he wrote, “and also like to hear their peculiar cry or bark. When there were many about they would answer each other from distant points, and a single one, even, make row enough to make you think it was a pack of them. And how they used to set the hounds in kennel baying and charming up!”

However entertaining, Cornwall’s “cayotes” were not spiritual beings. They possessed no powers beyond speed and cunning, no deeper agency than the will to survive. While he appreciated their talents, their deaths were meaningless beyond the sense of satisfaction they provided. He saw no need for remorse, nor fear of retribution; rather, he gloried in their deaths. The 19th century sportsman’s code required certain concessions -- that the quarry be given a “sporting chance,” for instance -- but these concerned the hunter’s honor more than the animal’s moral standing. Cornwall described the chase as “the image of war without its guilt and only twenty per cent of its danger.”

For Cornwall, hunting coyotes was an untroubled occasion, “a jolly gallop and kill.” It nonetheless assumed great importance in his life. Packed in with it were a host of associations: the hunt identified him as upper class, as British, as a vigorous man, living under a code of honor, and within a dashing and adventurous tradition.

(In a place) utterly devoid of the opportunities for rational recreation and amusement indulged in elsewhere by the upper classes of society,” Cornwall wrote, “the hounds were to us...the object of life -- they were life itself!

Cornwall lived in Nlha7kapmx territory, but his identification with the British elite remained with him as a refuge. The chase plotted him into a constellation of British aristocrats strung about the world.
Beyond the callings of his station, Cornwall revelled in the hunt. He writes of “the raptures of the chase”:

Oh! the thrill that went through one when that holloa or uplifted cap shewed that the varmint was at length found, and the ecstasy of the first few minutes which unmistakeably proved that there was a scent on which the hounds could race!.... Nothing, nothing whatever even approaches its intensity, and however attractive other pursuits and sports may be in their way...hunting must be placed first and the rest NoWhere! 53

The coyote was a vehicle for Cornwall’s pleasure, a source of amusement. Cornwall was hunting for “sport” not for practical use; the coyote’s death was important, but only as a spectacle, an “ecsta[tic] release” following the struggles of the chase. 54 Much importance was placed on the climax of the hunt -- the kill -- and much satisfaction rode on getting a view of this moment.

They killed him immediately, a very big old dog with a very poor brush. The run lasted nearly two hours!...The only drawback to the finish was that although we were all within a hundred yards no one actually saw the hounds pull the cayote down as it was within a little sort of gulch. If the death had occurred two minutes earlier in the middle of the big flat it would all have been perfect. 55

Cornwall derived voyeuristic pleasure from watching the dogs savage the coyote:

...as extraordinary luck would have it they actually brought the varmint down and killed him in the creek close by us!! 56
On occasion he would offer his assistance:

On the first day of hunting they left the kennels about ten a.m. Very shortly afterwards they viewed a “cayote” in the open, and getting away close behind they ran her for about a mile and a half at a tremendous pace. Now, however, she reached a high and rocky hill, going over which the hounds lost ground considerably; but still keeping hard at her they forced her over it and down the other side over a thickly-wooded creek bottom and into a fine rolling grassy country. Over this they had a steady hunting run with a capital scent; but the hounds were too much for as game a “cayote” as ever stood before them, and, after about two and a half hours, forced her to take refuge in a short hole on the side of a hill. Out of this a vixen was quickly dug with the help of a pointed stake, and the hounds, who were savage as savage could be, richly deserved the blood they got. 57

Cornwall pulled the coyote out of her den with a sense of entitlement. He threw her to the dogs and claimed his victory. The object of his hunt was to catch the coyote, and destroy it; this accomplished, his day was done. Coyotes did not feed or clothe Cornwall, or give him pause for reflection; they entertained him.

What coyotes made of these campaigns can only be speculated, but Cornwall noted an increasing wariness. “[I]n later years,” he wrote, “the cayotes got very wild here and were off at the slightest alarm, so both men and hounds learnt to be pretty quick.” 58

The sentiments of Cornwall’s neighbors may have contributed to the coyotes’ heightened awareness. Most settlers saw coyotes not as Cornwall’s “gay, sprightly” foxes, but as under-sized wolves, as vermin that threatened their livestock, or even their lives. 59 Cornwall wrote:

Hunting was...a sport utterly unknown to the great majority of the people of the neighborhood and very amusing were the remarks made and the ideas expressed about it. I think most people thought we took a deal of trouble and went to a great expense to
compass the death of a "cayote" and that a little strychnine or a rifle bullet would have accomplished our purpose more quickly and certainly more surely.60

In their early years at Ashcroft, the Cornwalls lost poultry and other animals to coyotes, and spread poison in response.61 Yet after he imported foxhounds, Cornwall defended the coyotes against their reputations for marauding:

For animals of the kind they did very little harm in a wild state. I often used to hear rumours of their having interfered with calves or foals but was never able to find anyone really able to authenticate any of such histories. They certainly never did any damage to our young stock, or to our fowls &c. But sheep and young pigs they would kill especially the latter of which they seemed very fond, and when once they took to sheep killing they would do a great deal of harm. Still many neighbours had small lots of sheep which escaped any loss so caused year after year. So on the whole they were very harmless.62

Self-interest played a part in Cornwall’s defense of coyotes. Poison baits threatened his quarry, and especially the fox hounds, that he had obtained at great expense from the Duke of Beaufort.63 He was apparently successful in preventing the use of poison in the vicinity of Ashcroft. “While we had the hounds here,” he wrote, “the neighbors were very kind about not laying out poison which under ordinary circumstances they are very much inclined to do.”64

Cornwall’s passion for coyote hunting, and disdain for poison, have their antecedents in Western history. Since classical times, the extermination of wild predators -- lions, tigers, boars -- has been the prerogative of the elite. Protective hunts began in aristocratic Greece, where nobles rid the countryside of predators, just as they defended it from marauding armies. They did so in keeping with their role as protector, and also as a demonstration of entitlement. The hunting of predators was a spectacular display of power. As such, it continued as ritual long after predator populations declined.65
Similar “protective hunts,” introduced by the Normans, eliminated the wolf and the boar in Britain, and later targeted smaller predators such as the fox. Yet as fox hunting grew in popularity, beginning in the 16th century, it “soon involved curious contradictions.” The ritual destruction of vermin became so important to the gentry, that with the decline in fox populations, the animals were protected and even bred for the chase. Although ostensibly a threat throughout the countryside, the foxes were no longer “fair game;” they could only be hunted according to the rules of sportsmanship and by elite hunters who had the dogs, horses, and leisure time to engage in a proper chase. The farmer who killed a fox in his henhouse, or the churchwarden who offered bounty for its skin, found their efforts condemned as “vulpicide.”

According to historian John MacKenzie, who has explored the history of British hunting at some length, “the logic of ‘protective’ hunting had been inverted. The ritual of protection against vermin had become so necessary to rural social relations that the vermin had to be preserved and increased. The sporting needs of the Hunt had turned the ‘vermin’ into a protected species.”

In like fashion, Cornwall protected coyotes in his vicinity from poison. He also captured coyote “cubs” and tried to raise them. “We used to turn out these captives before the young hounds in the autumn,” he wrote, “and they sometimes went well.”

Class distinctions permeated British hunting, creating an antagonism between practical hunting and what Mackenzie calls “the Hunt.” Cornwall’s coyote hunting -- and his neighbours’ skepticism -- can be interpreted in these terms. The Hunt was an elite, organized activity, conducted according to an elaborate system of rules, and dependent on the “progressive restriction of social access to hunting.” It was an expression of power and privilege, a display of dominance, and a builder of character, rather than a means of subsistence. Mackenzie associates it with a “shift from utility to inutility, and often from edibility to inedibility.” Practical hunting continues,

but it is despised by the elite (as) it fails to exhibit the character-forming, moral attributes of the Hunt. Because it is concerned with basic survival or baser commercial motives it takes the shortest route to destruction. In hunting the end is all-important, the death and
utilization of the animal. In the Hunt the means are all. The subsistence hunter is concerned with the ease with which his purpose can be achieved. The sportsman indulging in the Hunt is concerned with the difficulty. The greatest joy to the practical hunter is when the animal falls into a pit, is ensnared or simply lies down and dies. The sportsman regards the first two as base and unacceptable techniques, the latter eventuality as a disaster denying him his 'sport.'”

The Hunt enjoyed a revival in 19th century Britain. Mackenzie argues that Greek and Roman accounts of the Hunt, and its association with empire, “cannot have been lost on the classically educated elite of a new imperial State, Britain, in the nineteenth century. The aristocratic and intellectual disdain for hunting that was briefly displayed in (the 18th century) was soon replaced by a whole hearted adoption of the Hunt and its values by all branches of the elite -- with individual exceptions -- in the nineteenth century.” Indeed, much of the sportsman’s ethics espoused by conservationists at the turn of the century closely followed those put forth by Xenophon or Plato millennia earlier.

The ethics of the Hunt, and its inherent class bias, found its way to British Columbia via well-to-do British immigrants. These “country gentlemen” sought to create a “British countryside environment,” a pastoral mosaic of farm, pasture, and coppice, mainly on Vancouver Island and the Lower Mainland. In the interior, Cornwall rode the hills with other “large landowners,” such as W.J. Roper and Charles Vernon, and with prominent political figures. He recalled an episode when “one distinguished member of the Legislature hunting with us at Kamloops fell from his horse going down a steep declivity and rolled right into the middle of the pack which had killed their ‘Cayote’ at the bottom.” Many of these “squire-sportsmen,” like Cornwall, had political influence, and their mark can be seen on game policy. Their ethics endured in the province, but Cornwall’s coyote hunting did not.

Cornwall’s coyote hunting days ended in the late 1880’s, when the coyotes disappeared. “At the time I write their numbers are greatly diminished....I cannot see signs of more than two or three “Cayotes” about this place where formerly they used to be so numerous.” He attributed their decline to a “very virulent form
of mange,” contracted from carrion consumed after a hard winter. Following the outbreak, his manor became the haunt of bald, ulcerous, “emaciated” coyotes stealing his chickens and being “destroyed in quantities” themselves. His hounds succumbed to distemper, and the remainder were sold to a Manitoban.78

As more settlers moved into the region, Cornwall’s patrician vision eroded, and he was left with reminiscences:

...In those times population was scanty, every one knew every body else, hospitality was rife, and people were always glad to see each other. As it were, the whole country was one’s own, it was beautifully grassed throughout, “cayotes” were sufficiently numerous, and there was nothing to interfere with hunting. Now how different! Settlers all over the country poisoning and coursing “cayotes,” the face of the ground, through overstocking, eaten as bare as the palm of one’s hand and no Hounds!79

Coyotes in a Changing World

Teit’s Nlha7kapmx informants, or the ancestors they spoke of, might have interpreted Cornwall’s losses differently. They might have considered the agency of Coyote; they might have said the coyotes left because they had been mistreated, that they had burrowed back down to the animal realm. But then, the Nlha7kapmx world was also rapidly changing. Settler governments had imposed an apartheid system that restricted Nlha7kapmx territory to small reserves. At the same time, they expected the Nlha7kapmx to adopt settler economies, language, and religious practices. These policies simultaneously pushed Indians away and pulled them into the settler orbit. In other ways, cultural exchange was bilateral and voluntary. Although segregated, the worlds of the whites and the Nlha7kapmx infiltrated each other, especially in the economic realm. Settler economies relied on Indian labor and knowledge of the land. Their traditional economies curtailed, Indians sought work outside the tiny reserves and turned to ranching, farming, and orcharding.
These pursuits changed peoples' relationship with local ecologies, and with animals, including coyotes. Many Nlha7kapmx worked on ranches, or raised their own cattle or horses. Others kept chickens, pigs, and cows to supplement produce from their vegetable gardens. Within this new context, coyotes became livestock thieves and, in some cases, threatened Nlha7kapmx livelihoods. Many Nlha7kapmx hunted coyotes for bounty and likely pursued them otherwise.

How much this new relationship with coyotes changed perceptions of Coyote is impossible for me to say. Certainly, spiritual relationships with animals were disrupted by the influence of missionaries and residential schooling, and by the 1890's few Nlha7kapmx boys underwent puberty rites to obtain guardian spirits. Yet, rancher-coyote conflict seems unlikely to have challenged many beliefs. Coyote has always been a thief; stealing calves and chickens -- and being killed in retribution -- is entirely consistent with his character.

While ranching, farming, and other pursuits gained ground, hunting remained vital to the Nlha7kapmx economy, both for subsistence and for market. Teit lists venison among the most popular foods in Nlha7kapmx territory, along with new staples such as flour, sugar, and coffee. Yet the hunting was different. Not only were certain animals more scarce, the uses of them altered, and hunting methods changed by new technology; control of the hunting economy itself was increasingly usurped by the Provincial government. Where the Nlha7kapmx had once held a monopoly on their hunting grounds, and conserved game according to their own methods, now they were governed by white men's laws. The sportsman's ethic is a far cry from Nlha7kapmx values regarding animals and their use; its adoption and enforcement had consequences for the Nlha7kapmx economy, including their relationships with coyotes.

Here James Teit becomes not just the narrator but a character in this story. Teit was a Scottish settler who lived with the Nlha7kapmx at Spence's Bridge from 1884 until his death in 1922. During that time he married Lucy Antko, a Nlha7kapmx woman, worked as a guide and a hunter, learned the Nlha7kapmx language, and studied the local ecology. He also advocated on behalf of Nlha7kapmx rights during the last 14 years of his life, a period of growing Native activism.
Teit was in many ways a mediator between the old Nlha7kapmx hunting economy and its transformation within the context of provincial control. Teit hunted with the Nlha7kapmx, and as he did, he acquired knowledge of the land, knowledge that had been developed over hundreds of years. He learned the habits of animals, their gathering spots and migrations, and the best ways to intercept them. Teit became an authority on game, and was frequently consulted by A. Bryan Williams, who became the province’s first game warden in 1905. Teit made a living guiding wealthy Europeans on big game hunts, for which he hired Indians as assistants. In effect, Teit translated Nlha7kapmx knowledge of the natural world for Williams and the big-game hunters, as he had translated Nlha7kapmx culture for Boas.  

Teit was also a coyote hunter. He hunted them for bounty, as did many Nlha7kapmx. Nlha7kapmx hunters brought their skins or their bounty applications to Teit, and he brokered many such transactions between Nlha7kapmx friends and the provincial government. He used his connection with Williams to make convenient arrangements for bounty collection, and inquire about late bounty payments. In many ways, Teit brokered traditional occupations of Nlha7kapmx -- hunting and negotiating the landscape -- within the new white superstructure.

This new system of values and laws, faced with a growing scarcity of game, discouraged market and subsistence hunting and encouraged the killing of “big game” and “game birds” for sport. The ethics of the Hunt persisted, yet Cornwall’s appreciation of coyotes did not. Coyotes and other predators were classed outside the rules of sportsmanship and were to be dispatched by any means necessary. This system, governed by agricultural and sporting interests, remade the Nlha7kapmx landscape, and would change coyote geography throughout the province. Coyotes would soon be labelled “the enemies of wildlife” and their deaths would become increasingly unceremonious.
For coyotes, colonization brought new constraints, among them widespread persecution. Put up for bounty and generally despised, coyotes encountered a battery of assaults: strychnine-laced carcasses and metal leg-hold traps, not to mention packs of foxhounds. They renegotiated their runways, denning sites and home ranges within an increasingly hostile environment, an expanding patchwork of claims, fenced and defended, from which they were excluded. As predators, their role had been written out of the emerging settler ecologies, and to this day awaits reinscription.

Yet coyotes also made use of settler introductions, most significantly livestock and rail and road corridors. The importation of cattle, sheep, swine and poultry introduced not only new prey species, but a new form of animal social organization: the docile flock, composed of relatively slow-moving animals unable to defend themselves from predators. As to be expected, coyotes took advantage of the opportunities these animals presented.

Coyotes used roads and railway tracks both as larders and transportation corridors. They ate spillage from rail cars and pack trains, as well as dead animals left by the wayside. Coyotes made their way to Alaska and the Yukon scavenging the carcasses of exhausted pack animals headed for the gold fields.\(^{92}\) It is likely that they used the Fraser Canyon road and later, the railroad, in similar fashion. While railroads cut travel times and brought Lytton closer to Vancouver, they also brought the newly cleared Fraser Valley closer to coyotes. Six years after the completion of the Canadian Pacific Rail road, coyotes would make their first appearance downriver.

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1 According to Semalitsa, a Nlhaʔkapmx woman from Stryen who relayed the story to James Teit, “some Indians thought [Fraser and his men] were just people from a far country and of a different race, for they had heard vague rumors of the strange people with guns, who, it was expected, might find their way to this country some time; but very many people thought they were beings spoken of in tales of the mythological period.” James Teit, *Mythology of the Thompson Indians*, Vol. 8, Part 2, *Publications of the Jesup North Pacific Expedition*, E.J. Brill: Leiden and G.E. Stechert, New York, 1912, p. 415.

Clement Francis Cornwall, The Story of the Coyote Hounds, 1868-1888, unpublished transcript, B.C. Archives (BCA), MS-0759. This 100 page reminiscence is a remarkable look into Cornwall’s passion for the chase.


Teit, Thompson Indians, p. 249
Teit, Thompson Indians, p. 184
Teit, Thompson Indians, p. 307-8
Teit, Thompson Indians, p. 218
Teit, Thompson Indians, p. 243
Teit, Thompson Indians, p. 213-219
Teit, Thompson Indians, p. 354-5

K’kemtsin (Spence’s Bridge) was “one of the principal points for intertribal trade,” in the region. Teit, Thompson Indians, p. 259-60

Stanley P. Young and Hartley H. Jackson, The Clever Coyote, Harrisburg: The Stackpole Co., and Washington D.C.: Wildlife Management Institute, 1951, p. 115. “Cased” skins are removed like a wrapper off of a candy bar; slit at one end, the skin is inverted as it is peeled away from the body. The result is a tube instead of a flat skin.


Barry Lopez, Of Wolves and Men, New York: Charles Scribner’s Sons, 1978, p. 93


John Keast Lord, The Naturalist in Vancouver Island and British Columbia, London: R. Bentley, 1866, p. 221-223. Lord writes of a visit to “Sweltza” (Cultus Lake) where he saw a “tribe of Indians that had a number of dogs, that were hardly in any degree altered from the coyote; more than this, they actually burrowed deeply into the ground to bring forth their young, and it was a common thing to see the puppies playing as young foxes do, at the entrance to the burrows, dashing into them like wild beasts on the slightest alarm.”


Teit, Thompson Indians, p. 348


Teit, Thompson Indians, p. 291
Teit, Thompson Indians, p. 367
Teit, Thompson Indians, p. 304
Teit, Thompson Indians, p. 373
Teit, Thompson Indians, p. 374

Teit wrote that “all animals and everything that grows, such as trees and herbs, and even rocks, fire, and water, are believed to have souls, since they were people during the mythological age.” He also notes that animals had “names of their own” which provided insight into their power. Teit, Thompson Indians, p. 355-357

Some animals, including “the mouse, chipmunk, squirrel, rat, fool-hen, butterfly,” most birds, as well as trees and herbs “had no mysterious power and did not become the guardian spirits of men.” Teit, Thompson Indians, p. 354


Teit, Thompson Indians, p. 343-4
Teit, Thompson Indians, p. 360
41. Teit, *Thompson Indians*, p. 368
42. Teit, *Thompson Indians*, p. 371
43. Or, in the case of large predators, an exaggerated ferocity.
46. Cornwall, *Coyote Hounds*, p. 24-26
47. Cornwall, *Coyote Hounds*, p. 31-2
49. Cornwall, *Coyote Hounds*, p. 36
50. Cornwall, *Coyote Hounds*, p. 33
51. Cornwall’s diaries read like a *Who’s who* of 19th century British Columbia, yet coyotes command more attention than all the dignitaries combined.
52. Cornwall, *Coyote Hounds*, p. 36
53. Cornwall, *Coyote Hounds*, p. 35-6
54. This is Mackenzie’s phrase. Mackenzie, *Empire*, p. 42
55. Cornwall, *Coyote Hounds*, p. 74
56. Cornwall, *Coyote Hounds*, p. 78
57. Cornwall, *Coyote Hounds*, p. 82-3
58. Cornwall, *Coyote Hounds*, p. 34
59. Jessie Ann Smith, *Widow Smith of Spence’s Bridge*, Merritt: Sonotek Publishing, 1989, p. 45-6. Many settlers perceived wild animals -- even coyotes -- as a threat to their personal safety. Smith (who immigrated with her husband, and a 17-year-old James Teit) writes of the home she moved to in 1887. “We were far from any other settlers and our nearest neighbours were several miles away. Cougars, coyotes, wolves, black bears and grizzly bears had been seen in the valley and I was glad that the children were too young to go out alone. The children were also too young to be afraid, but I lay trembling with fear all night. I heard a wild animal howl quite near to the house and I did not put out the lamp until morning.” For attitudes on coyotes as vermin see *British Columbia Sessional Papers*, “Report on Agriculture for 1892,” 55 Vict, p.845 and “Report on Agriculture for 1894,” 57 Vict, p. 1882-3.
60. Cornwall, *Coyote Hounds*, p. 46-7
61. Clement Cornwall’s brother, Henry, wrote on December 13, 1864: “The cayooties are very troublesome, they have I fear killed 8 or 9 of the hens -- They stay by the house all day -- There were 4 there together today & I shot at one with the rifle but the ball was a little too high.” On December 23, he noted: “Found two dead coyotes which we have poisoned.” *Diary of Henry P. Cornwall, Ashcroft, B.C. Dec. 10, 1864 - June 13, 1865*, transcribed by Winifreda Macintosh, April 29, 1963, BCA Add Mss. 758, p. 4.
62. Cornwall, *Coyote Hounds*, p. 28
63. Cornwall, *Coyote Hounds*, p. 4
64. Cornwall, *Coyote Hounds*, p. 29-30
65. Mackenzie, *Empire*, p. 17
66. Mackenzie, *Empire*, p. 18
68. Thomas, *Natural World*, p. 164, 274. Vulpicide was defined as “the secret killing of a fox.”
69. Mackenzie, *Empire*, p. 18
70. Cornwall, *Coyote Hounds*, p. 27-8
72. MacKenzie, *Empire*, p. 10
MacKenzie, _Empire_, p. 10-11. Cornwall judged the success of his hunts on distance run and time spent in the chase, and shows disappointment at killing an “over fat ‘cayote’ after a poor run.” (Cornwall, _Coyote Hounds_, p. 80)

MacKenzie, _Empire_, p. 12-3

Ball, _Wildlife Management Practices_, p. 92. The Hunt also found its way via big game enthusiasts, who began stalking B.C.’s hunting grounds following the building of the railroad.

Cornwall, _Coyote Hounds_, p. 39

Ball, _Wildlife Management Practices_, p. 93

Cornwall, _Coyote Hounds_, p. 28-31

Cornwall, _Coyote Hounds_, p. 50-1

Baillargeon and Tepper, _Legends of Our Times_, p. 6.

For a discussion of Nlha7kapmx ranching, see Baillargeon and Tepper, _Legends of Our Times_, p. 82-115.

Teit, _Thompson Indians_, p. 237


Traditional Coyote stories inhabit the repertoire of many present-day elders, among them former ranchers.

Teit, _Thompson Indians_, p. 249


James Teit to A Bryan Williams, June 25, 1908; James Teit to A Bryan Williams, Nov. 22, 1911; James Teit to A Bryan Williams, Jan. 28, 1908; A Bryan Williams to James Teit, May 20, 1912; James Teit to A Bryan Williams, May 30, 1912. BCA, GR-0446, Box 16, File 2 and Box 36, File 2.

See correspondence between Teit and Williams, Jan - Mar 1917, BCA, GR0446, Box 77, File 16; also May-June 1913, GR 0446, Box 43, File 1.

Except for a brief stint at the ill-fated Walhachin settlement. See Joan Weir, _Walhachin: Catastrophe or Camelot?_ Surrey: Hancock House, 1984, p. 46.


DOWNRIVER
CHAPTER 4

COYOTES DOWNRIVER

Downstream from Nlha7kapmx territory, the Fraser River spills out of its canyon and relaxes across green bottomlands. Lying at the western base of the Cascade Range, and surrounded by peaks on three sides, the Fraser Valley is a pocket of lowland tucked between towering hills. Home to the Sto:lo (river) people, S'olh Temexw (Our Land) is favored by a moderate climate and the gifts of the river: fertile delta soil, navigable waters, and once abundant fisheries.

In the early 19th century, the valley was a mosaic of forests and wetlands. Wet prairies and peat bogs were found in low-lying areas; stands of poplar, hazel, birch, cottonwood, and alder lined the river banks and prairies. Higher and drier soils supported forests of Douglas fir, cedar, and hemlock, with understories of vine maple, dogwood, nettles, devil's club, and a variety of berries; bracken ferns, sometimes reaching 10 feet in height, grew on open slopes and burned areas. Cedar was used extensively in the construction of housing, canoes, carvings, and various household implements; its bark was used to weave clothes and baskets. Maple was also used for bows, dishes, and smaller items. Berries and bracken fern roots were important staples among the Sto:lo, as were camas, wild onion, and arrowhead (scous), which were gathered along the river. Hazelnuts were picked in the autumn.

This mixed landscape supported a diverse fauna. The sloughs and marshes were home to mink, muskrat, otter and beaver; the forests supported small predators such as pine marten and fisher, as well as their prey: Pacific flying squirrels, Townsend’s chipmunks, creeping voles, a variety of shrews, and shrew moles. Black bears, porcupines, raccoons and skunks also lived in the woods. Larger carnivores -- cougars and wolves -- moved through forest and prairie, and fed on elk and black-tailed deer. Waterfowl visited the Fraser Delta (part of the Pacific flyway) during seasonal migrations, and were drawn to Sumas Lake and other wetlands, as were a variety of songbirds. Raptors scanned the prairies and nested in the forests. Insects, most infamously the mosquito, and a variety of amphibians also inhabited the watery environment.
The Sto:lo hunted many of the birds and larger animals, especially black bear, deer, elk, beaver, ducks, eagles, and geese.\(^5\)

Yet the river was the centre of Sto:lo life, and fish, primarily salmon, was the mainstay of their economy. Villages dotted the banks of the Fraser and some of the larger streams. Canoes plied the waterways, which were the Sto:lo’s main transportation routes. As such, Sto:lo impact on the land was slight; yet it would be wrong to say that they lived in a “wilderness.” Rather, they lived in an intensively known and storied environment, marked by family-owned fishing spots, root and berry harvesting sites, and other resource procurement areas.

This did not change when the first whites came to *S’olh Temexw*. In 1827, the Hudson’s Bay Company built a permanent trading station, Fort Langley, near *Sqwalets*. The Company sought beaver pelts, yet the Sto:lo ended up trading more salmon than furs.\(^6\) Nonetheless, the beaver in the Fraser Valley were “nearly eliminated within a generation after the founding of Fort Langley.”\(^7\) The Company also introduced farming and animal husbandry to the area, albeit on a small scale. The reduction of native species, the importation of European livestock, and the clearing of land for agriculture would assume larger dimensions in the years following 1858, when gold was discovered up the Fraser River, and European settlement began on the Mainland. Until then, the Fraser Valley was a landscape governed by the Sto:lo, covered with forest and wetland, and coursed by wolves. The story of coyotes in the Fraser Valley begins only when this world starts to shatter.\(^8\)
In 1873, John Fannin climbed Discovery Peak east of Chilliwack and gazed across the Lower Fraser Valley. Sent by Chief Commissioner of Lands and Works Joseph Trutch to explore the New Westminster district, Fannin records his summit musings in his report to the Commissioner.

From here the river can be traced, through all its windings, eighty miles to the Gulf; and looks still and motionless in the distance. New Westminster can be seen with the naked eye, and every settlement along the river can be readily distinguished...

Laid out before him like a mounted specimen, the valley revealed its potential:

Here also can be seen, in the country between Chilliwhack and Cheam, new openings made by recent settlers; looking upon which, as new signs of awakening prosperity, the imagination wanders into the future when these green plains shall be dotted with herds, and the tangled growth of forest which now covers the virgin soil of the uplands, shall yield to the hand of hardy industry, and fields of waving corn shall take its place; when the eye from this point will rest on many a hamlet; and the sound of human voices, and human industry, will fill the space where now is silence and solitude.

Fannin admits that his sketch may seem “fanciful,” but insists that

...it can scarcely be consistent with the natural course of events, that this beautiful valley will remain long as it is, a comparative wilderness, while so many of our fellow beings are struggling for a miserable existence in the crowded homes of the old world.  

Fannin presented an archetypal pioneer vision. Ignoring native settlement, he anticipated a just and natural “course of events” unfolding in the valley, in which industry uproots the suffocating “wilderness” and enlivens the valley with the hum of human activity. In his explorations, Fannin searched the native landscape for mutability; for prairies that could be grazed by Holsteins, trees that could be split into fence
posts, forests that could be felled for farm land. He paid special attention to soil -- the only essential native ingredient that could be reclaimed, with enough labor, from the plants and animals that concealed it, and made to nurture crops and livestock. Fannin saw a landscape in potential; in the wet meadows and cedar forests of Sto:lo territory, he sought the makings of an English countryside.

Fannin located prosperity within the geography of a European farmstead, rather than in the wealth of salmon in the river, for instance, or the game animals in the woods, or the integrity of the native ecosystem. Of the farms in Chilliwhack, he wrote:

"Here are to be seen those signs which are the certain indications of prosperity; extensive and carefully cultivated fields, large and well filled barns, and neat and comfortable looking farm-houses, surrounded with their gardens of fruit and vegetables. These signs not only point to the great fertility of the soil, but have a tendency to inspire the new settler with hope and energy, and to this fact may be attributed the large increase of settlers in this neighbourhood during the last three months."\(^{11}\)

Likewise, he wrote that "impenetrable jungles" of fern, brush, and fallen timber are likely to "turn away" the "intending settler."\(^{12}\) In Fannin's normative landscape, the places themselves, the barns, the fields, and the bracken fern patches, invite or repel prospective settlers. The tidy homestead has a symbolic power strong enough to attract settlers in numbers, and fill them with hope and enthusiasm.

Part paean to the "loveliness" of the emerging rural landscape; part inventory of soils and topography, and vegetation; and part speculation on the value of the land once cleared and "in the hands of practical farmers," Fannin's report outlined settler priorities. As an official report, included in the minutes of the Legislative Assembly of B.C., and as a printed document, it was a mobile representative of the land. It became one of the few ways the district was known to both policymakers and prospective settlers. To the extent that the provincial legislature relied on it to make decisions about pre-emption policy, road-building, and other public works issues; and to the extent that prospective settlers saw in it a glimpse of a future
home, Fannin’s report helped construct a Fraser Valley both on the page and on the ground. His words would be echoed in newspapers and promotional literature, and -- while not inevitable -- within the next few decades, his predictions would come true.

Agricultural settlement had begun in the Fraser Valley fifteen years earlier, as a consequence of the Fraser gold rush. In 1858, following the first flood of miners up the river, British Columbia was declared a colony, and a contingent of Royal Engineers was sent from England to survey land, build roads and infrastructure, and provide a military presence. Soon afterwards, land was made available for pre-emption. A few enterprising people drove cattle to the valley from Oregon. There they pastured the animals and sold the meat to miners passing through. Some discouraged miners returned to the valley, and tried their hand at farming. Many of the Engineers took up plots of land when their service ended in 1863, as did retired Fort Langley employees, and other settlers, many from Ontario, and mainly of British origin. By 1866 there were 250 farms in the valley.

These farms, and the many to follow, were expropriated without consent of the Sto:lo, who were allotted modest reserves in 1864. Four years later these reserves shrank further, under the orders of Fannin’s employer, Joseph Trutch. Throughout the 19th century, Sto:lo people continued to fish, and many worked for canneries. Some earned a living logging, building roads and railroads, or working on steam ships. Few took up farming, but instead took seasonal work on settler farms, particularly in the hop fields. This allowed continued participation in traditional seasonal activities. Although the pre-emption and transformation of land limited Sto:lo hunting, and the harvesting of plants, these remained important pursuits.

In 1871, B.C. became a province of Canada. Fannin’s report, written two years later, reflects the growth of settlement following Confederation. Especially promising was Ottawa’s pledge to build a transcontinental railway, with the western terminus at the mouth of the Fraser. At Confederation, 1292 whites lived in the Fraser Valley, including 286 farmers cultivating 1200 acres. Ten years later, the number of settlers had grown to 15,417 (including Burrard Inlet). There were 550 farmers, each with more than 10 acres. Much of
this growth occurred in the years prior to 1875, after which faith in the Dominion's railroad promise waned. Yet the railroad was built, and a second wave of settlement followed its construction in the mid-1880's. Growth continued steadily afterwards, and by 1891, over two thousand farmers called the Fraser Valley home.16

Agricultural settlement transformed the ecology of the region. Farmers cleared and drained land, introduced non-native vegetation, imported domestic animals and game birds, and persecuted native predators. In a prolonged episode of "ecological cleansing,"17 settlers consciously remade the ecology of the region, selectively encouraging alien species, and attacking those deemed undesirable. Yet their success in these efforts was uneven, transient, and elusive.

The first pre-emptors chose natural prairies to avoid intensive clearing. Later settlers would contend with the forests, the more fortunate clearing smaller stands of maple and alder, the unlucky burning and hacking at groves of 600-year-old Douglas fir, cedar, or hemlock. The clearing of farmland was aided by the growth of commercial logging, which began in the 1880's. By 1913, all but the mountains would be bare of forest. What once had been "pioneer homesteads in an expanding clearing" would become "cleared countryside with orchards, turf, and crops."18

Once cleared, the lands were ditched and drained to accommodate familiar European livestock, fruit trees, and field crops. Some of the lands were easily drained, but others contained beaver dams which were difficult to remove. Settlers also faced the vicissitudes of the river, and gained provincial funding for dykes to contain its waters.19 Dry land was plowed and sown with grains (oats, wheat, barley, and peas) root vegetables (primarily potatoes), or specialty crops such as hops. Many settlers planted fruit trees, especially apples, pears, plums, cherries and peaches; some orchards contained thousands of trees. Fields of timothy and clover were cut for hay, or used to pasture Durham cattle and Holstein dairy cows. Settlers also imported Berkshire pigs and some raised Cotswold sheep; many kept chickens and grew kitchen gardens. In 1881, valley settlers owned 1,868 horses, 13,067 cattle (including 3713 "milch cows"), 4392 pigs and
1634 sheep. Despite the diversity of agricultural production, dairying and orcharding emerged, by the end of the 19th century, as the two main pursuits.\(^{20}\)

Agricultural production survived precariously within a disturbed -- and dynamic -- ecological matrix. Farmers fought off diseases, insects, and unwanted flora, just as they held back the flow of the river. Farmers also battled local fauna, who made use of the products of their labor. Cougars -- and, in earlier days, wolves -- killed cows and sheep. Bears showed a liking for pigs and ripe peaches, and skunks favored chickens. Rodents ate potatoes and oats, and crows and jays ate grain.\(^{21}\) In an 1894 Department of Agriculture survey, Fraser Valley farmers listed bears, “panthers” (cougars), “wild-cats” (bobcats), skunks, crows, Steller’s jays, Brewer’s blackbirds, magpies, weasels, minks, squirrels, rats, mice, moles, chipmunks, racoons, rabbits, and “Indian dogs” as pests.\(^{22}\) A. Bryan Williams, then a resident of Nicomin, near Chilliwack, complained of deer “doing great damage” to fruit trees.\(^{23}\) Richard McBride, the future premier, complained of musk-rats digging holes in dykes at Lulu Island.\(^{24}\)

Farmers used bullets, strychnine, and traps to rid their land of “vermin.” Those who shot wolves and cougars were rewarded with bounty cheques.\(^{25}\) Farmers might scare off a roaming cougar, yet they could not insulate their fields and pastures from the wild animals who lived there. Along with abundant produce, farms provided good habitat for a variety of creatures. Rodents and birds found food and shelter not only in the fields, but in barns and houses, in fruit trees, in the tall grass that grew along ditches, and in the unplowed areas near fences. Racoons, skunks, and other meso-predators travelled the fence lines and waterways in search of smaller prey. For adaptable animals, the farmer’s produce was just one attraction in the agricultural landscape.

Other animals, the more specialized forest and marsh dwellers, fell victim to habitat loss. Predators felt the impact of persecution efforts, and valuable fur bearers declined. In 1902, naturalist Allan Brooks catalogued the mammals of the Chilliwack district. In doing so, he summoned the ghost species of its past, and provided a glimpse of the impact of European settlement on the valley. He wrote that wolves were “very scarce,” and noted the declining abundance of black bears and bobcats. According to Brooks, fishers
were "at one time frequently seen throughout the district," but at that time were "very rare," as were their cousins the pine martens. Both animals were valuable fur bearers and lived in forests. Of the beaver, he noted "a few hold out in the mountain streams, and occasionally in the Fraser itself." The native species most abundant in the valley were those able to live in the agricultural landscape.

Another class of animals also grew in numbers. These were game animals, mainly deer and waterfowl, and ground nesting birds such as grouse. From the 1890’s onward, these populations were supplemented with imported, semi-wild Mongolian pheasants, Hungarian partridges, and other “game birds.” Many of them were raised in sheds, and fed grain in the winter, but they were classed as wild game, and intended to give good sport to the hunter. Together with the native grouse, they became the focus for shooting clubs in the valley. Protection of game bird stocks became another reason to kill predators, who fed upon the often ailing creatures. Ironically, the grain-eating birds were considered pests by many farmers, as were the “city-folk” who pursued them across the fields. The birds would cause conflict between proponents of agriculture, and game enthusiasts; however, they were the pet project of many of the most powerful and well-established settlers in the valley, who fashioned themselves sportsmen. Influential leaders such as William Ladner inaugurated the first game protective associations, and introduced legislation to protect game birds in the Lower Mainland.

By the turn of the century, the transformation of the valley was well underway. The promising clearings Fannin spied from Discovery Peak had grown into "a well-organized agricultural settlement...as acres of farm lands dominated the landscape." What had been a mosaic of marsh and forest had become a grid of pre-emptions, a patchwork of tilled plots and remnant forest -- and an approximation of the rural ideals settlers brought to the valley. But in another sense it became a new ecosystem, a drier, grassier biome with fruit-bearing trees and large hoofed mammals, plenty of rodents, and few predators besides humans. It became inviting habitat for coyotes.
"Coyotes of late years have made their appearance in the Chilliwack Valley," wrote the naturalist Allan Brooks in 1902; he later gave the date of their arrival as 1892, coincidentally the year coyote bounties were instituted in the province. By this time, wolves and cougars had been under bounty for 23 years, and the decline in their populations opened space for coyotes in the Fraser Valley.

Brooks dates the last wolf sighting in the Chilliwack area at 1885; however, sightings were also made as late as 1916 in Chilliwack, in the mid-1920's in the hills above Emory Creek, and from 1939-1943 in the "Coquitlam, Pitt, Allouette, and Stave Lake areas." Wolf pelts were presented for bounty at New Westminster and Vancouver throughout the first half of the century, but Williams contended that "at least 90 per cent of these animals were killed in the northern part of the Province," and brought to the fur exchange in Vancouver.

In the absence of wolves, coyotes fit well into the developing agro-ecosystems, hunting both mesopredators and their smaller prey. Young livestock, game birds, and grass supplemented the coyote diet, as did fallen fruit from orchards. Although coyotes adapt to any environment, they prefer more open and drier landscapes to dense forests and swamp. Their speed in the chase declines in the latter environments, as does the availability of prey and ease of capture. The Fraser Valley at this time would have provided both open fields and cover in thickets or forested fringes.

Attractive habitat helped coyotes live in the Fraser Valley, but what led them into the area remains speculative. Along with easier access via the Canadian Pacific Railroad tracks, persecution may have also played a role. Thousands of coyote pelts were submitted for bounty in the adjacent Yale district in the 1890's (and probably earlier, as "wolves.") This may have increased birth rates, producing more dispersers who would seek new territories far afield.

Having rid the valley of wolves, settlers did not embrace this new breed of wild dogs. As perceived threats both to livestock and to the ideals of a secure and civilized settlement, the influx of coyotes seemed to belie
the steady progress central to the settler vision. Coyotes introduced new uncertainty into agricultural pursuits, and interjected predation in a more spatially efficient, elusive, and flexible form.

By 1896, coyotes were reported as pests in Emory and as far west as Richmond. Since then, agricultural and urban development have expanded, and coyotes have maintained a continuous if at times tenuous presence in the valley. Theirs was an uneven “invasion,” and for the better part of the 20th century coyotes lived as they had with wolves: low key, in low numbers, in the spaces in between the fiercely protected territories of the settlers -- and on the receiving end of the province’s campaign against predators.

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1The Sto:lo set fires to rid cranberry bogs of pine and other competing species, and to maintain root harvesting sites; these sometimes spread to surrounding forests, creating openings and new growth. See Donna Cook, *Early Settlement in the Chilliwack Valley*, unpublished thesis, University of British Columbia, 1979.


3Duff, *Upper Stalo*, p. 73.


6Carlson, *You are Asked*, p. 51.


8If J.K. Lord and others are right, domestic coyotes lived among the Chilliwack and the Swilhcha. These coyotes lived as dogs: they travelled with and worked for humans and were somewhat obedient to them. By excluding them, perhaps I reinforce the split between wild and domestic animals. Biologist Donald M. Waller claims that an animal is “wild” if it exists within an “ecological context essentially similar to the one its ancestors evolved in...A Chihuahua is no wolf, even if they share most of their genome.” Donald M. Waller, “Wilderness Redux,” *Wild Earth*, Vol. 6, No. 4, Winter 1996/7, p. 39. Yet, many “wild” coyotes, living in the city, would challenge that definition, as would dogs attacking sheep in the Fraser Valley. It is interesting to note that “Indian dogs” were a source of many complaints in the Fraser Valley. British Columbia. Department of Agriculture, Report for 1894, p. 1882; British Columbia. Department of Agriculture, Report for 1933, p. Y46.


12Fannin, *Report*, p. 3.

13Trutch was already very familiar with the Fraser Valley, having surveyed the land west of New Westminster for the Royal Engineers in 1860. His comments on the allocation of Indian Reserves in the area reveals his pro-settlement agenda. It seems likely that Fannin was sent to provide further grist for
Trutch's mill. For Trutch's views, see Papers Connected with the Indian Land Question, Victoria: Wolfenden, 1875, p. 41-43.


15 Carlson, You are Asked, p. 115-119.


18 Terrence Arnett, Chilliwack Valley Continuum, Ch. 2, p. 56.


23 ibid, p. 1887.

24 ibid. p. 1884.


26 Allan Brooks, “Mammals of the Chilliwack District, B.C.,” The Ottawa Naturalist, Vol. 15, No. 11, February 1902, p. 239-244.


28 Cook, Early Settlement, p. 66.


CHAPTER 5
COUNTERING COYOTE

"In a lot of cases, Coyote would challenge something and he would be overpowered and killed, but he
would return to life and transform whatever had killed him into what it is now, more or less." 1

As settlers claimed native land, and secured it with government orders, they also claimed ecological space,
and defended it with government assistance. Ranchers, who claimed range for their cattle and sheep, sought
a space free from predators, a sheltered niche in which to keep their stock. Sportsmen wanted protection for
their quarry, who were rapidly declining in the face of unrestricted market hunting. Stockmen called for the
destruction of wolves, cougars, and coyotes; sportsmen went further and demanded laws imposing bag
limits, closed seasons, and game protection near towns -- that would, in essence, establish government
control over both human and animal predation.

In response to settler initiatives, the provincial government progressively assumed responsibility for the
fauna of B.C. The first law regarding animals was passed in 1859, and succeeding laws were enforced --
minimally -- by local magistrates and police officers. By the end of the 19th century, the province had
grown such that formal administration of these laws became both more necessary and financially possible.
In 1891, the Department of Agriculture was formed, and domestic animals became its charge. In 1905, of
the Department for the Protection of Game and Forests 2 was established, and wild animals came under its
"care." Coyotes were the responsibility of the latter, although they were of concern to both agencies.

These agencies took responsibility not only for enforcing laws, but for arbitrating a broader discourse on
animals. Agency "experts" -- be they game wardens, grazing commissioners, or later, biologists -- collected
and interpreted the reports of their constituents, the results of studies, and the returns of license fees and
distilled them into policy, advice, and in the case of coyotes, both a mandate and methods for slaughter.
While settler accounts suggest attitudes towards animals and nature, the Statutes of B.C. and the yellowed
reports of the Provincial Game Warden and the Department of Agriculture document ideology.
Geographer Tim Cresswell writes that the best way to uncover the intersection of ideology and space is to look at transgression -- instances of "being out of place." In agency reports -- as in most of North America -- coyotes appear as principal transgressors. Their trespasses highlight the boundaries set for them, they uncover a marking of territory often camouflaged by assumptions about the place of wild animals in our society. By breaking the rules, coyotes place them in bold relief, and allow us to examine them not as "natural" or "expert" observations but as ideological constructions of nature, predation, and wildlife in the region. Predator control can be seen as the negotiation of boundaries between animals like coyotes, and the expanding settler ecologies that sought to exclude them.

The history of predator control registers changing views of wildlife and predation, but more directly it chronicles the crafting of those views into weapons. This chapter discusses three successive coyote control strategies (the bounty system, "scientific" management, and problem wildlife control), their attendant ideological shifts, and their spatial dimensions.

Lastly, and perhaps most importantly, this chapter argues that coyote control has been a losing battle: an attempt to claim space from a species that thrives in the margins; an effort to exterminate quintessential survivors. The evolution of predator control in B.C. is best understood as a progressive concession of space. Coyotes began the 20th century as universal pests, but this characterization became more geographically specific as successive predator control strategies confronted their messier analogs on the ground.

**Destruction of Vermin**

Coyotes began the 20th century as "noxious animals," undeserving of the protection afforded stocks of domestic animals, big game, game birds, waterfowl, and valuable fur bearers. They belonged to a class of animals -- vermin -- that fed upon the "living resources" of the province, with no regard for law. Coyotes were condemned as a species, and shot "on general principle whenever they appear[ed]."
The Department of Agriculture called coyotes “the worst predatory animal we have,” and claimed that sheep and poultry raising were “rendered unremunerative by reason of the depredations of this animal.” It classed coyotes among a multitude of agricultural “pests,” from potato blight to wheat midges to chicken cholera. Coyotes were also seen as a threat to game animals. In a letter published in the 1891 Report on Agriculture, William Macmyn of Rock Creek claimed that “if the coyotes were killed off we would have far more game in the district, such as grouse, prairie chickens, deer, &c.” Similarly, the Game Department complained that the Interior “swarmed with these pests;” it decried the “coyote menace” and at other times it likened them to thieves. Sometimes poachers, sometimes plagues, coyotes flickered in and out of the two realms -- the social and the biological -- implied in the word, "pest."

Coyotes were pests in a province that presented itself as the "best game country in the world," and in regions that were struggling to define themselves as "sheep-raising territory," "dairying country," or any variety of agricultural mecca. Within this context, coyotes were immediately suspect, and their presence itself was akin to an act of predation. Caught within a normative vision that privileged ranching, agrarian, and game hunting interests, and the managed, prey-heavy ecologies they desired, coyotes threatened prosperity and ruined men’s fortunes; they devoured innocent animals and destroyed valuable game. Orchardists occasionally defended coyotes, as they helped reduce numbers of tree damaging rabbits. Yet, in the estimation of most farmers, ranchers, game associations, and the lawmakers who represented them, coyotes reddened BC’s balance sheet far more than they blackened it. As such, they were candidates for extermination.

Although stock raisers and farmers shot coyotes and laid poison, many complained that their efforts were fruitless, and the job of extermination too large. Only constant shepherding could prevent coyote predation, and this task, they argued, was also beyond their means. In petitioning for bounty, they sought, not only a subsidy for themselves, but the creation of an occasional labor force who would rid their pastures and hunting grounds of coyotes. In 1892, the province put a $2.50 bounty on coyotes; this dropped to $1 per pelt in 1895, and would fluctuate between the two sums for the next 30 years.
The bounty provided incentive for trappers, hunters, farmers, laborers, or anyone with a shotgun to hunt and kill coyotes. Any individual who visited the local magistrate and produced the scalp of a coyote was awarded the $2.50 prize. Those who collected bounty were a varied lot, and their motivations differed. For Charles Mair, a “roadman” in Yale, the bounty was a substantial supplement to his income. Mair presented 16 coyotes and 8 wolves for bounty in 1892, and received $80 for doing so; how much more he received for the sale of their pelts is unrecorded. The same year, another labourer in Yale, August Castle, laid two coyote skins across the counter, and collected only $5. Castle may have killed the coyotes regardless of the incentive of the bounty; he may have been moved by other sentiments or objectives -- a fondness for shooting, hatred of coyotes, or a sense of civic duty. Whatever their motivations, both men were vehicles for realizing a relationship -- an antagonism -- between government and coyote that had been written into law.¹⁰

Three years after the bounty was established, the number of coyotes presented surpassed the number of cougars and wolves bountied over the previous 22 years. Between 1892 and 1905, 23,547 coyotes were presented for bounty, and the province paid $38,038 in appreciation. These numbers eclipsed those of cougars and wolves, representing 87% of skins presented and 57% of funds expended. The majority of coyote pelts (58%) were presented in Yale District, which included Nlha7kapmx, Shuswap, and Okanagan territories. Most years, bounty claims overran their budgets, and surplus skins were turned away until the next funding cycle.¹¹

The number of coyotes submitted for bounty continued to rise as the newly-formed Department of Game assumed responsibility for the “destruction of noxious animals.”¹² Game Warden A. Bryan Williams approached the bounty with some skepticism, and this only grew with time.¹³ As early as 1908, he wrote about the problem of fraud, and in his report for that year, noted the U.S. government’s use of predatory animal hunters “to put out poison and track the animals during the breeding season.”¹⁴ Williams’ comments would be echoed throughout the first half of the century by game officials, who increasingly acknowledged the futility of the bounty system. Yet their words found little support among their constituency -- the
hunters and trappers who both collected bounties and associated them with higher game populations -- and among the stock raisers and farmers who equated higher bounty payments with lower predation.

Higher bounty payments may have increased the number of coyotes killed, but this did not guarantee fewer coyotes the next year, or fewer depredations on sheep. To believe so was to rely on a simple arithmetic to explain the complex dynamics of coyote predation, reproduction, and mortality. Yet in the beginning, Williams relied on numbers. Each year he reported the “returns” of coyote pelts as if they were ballots cast against the species’ existence. He calculated the current number of coyotes, and predicted the next year’s populations by the amount of bounties submitted. His calculations, however, left out three critical factors.

The first is coyotes’ adaptability, specifically their density-dependent birth rates. As bounty hunters thinned coyote populations, they created more favorable conditions for reproduction. Lower densities and greater food availability encourage female coyotes to ovulate in their first winter and produce up to twice as many pups. The second factor is geographical. Because it was geographically non-specific, the bounty literally skirted the problem it was intended to address. Bounty hunters mostly worked away from human settlement and picked off the inexperienced, dispersing juveniles. It was not worth the time and effort to chase more wily individuals, who had established home ranges next to farms and ranches. Bounty hunters ran a coarse filter through coyote populations. They reduced coyote densities, but this only encouraged larger litters, and lessened competition for the older, experienced sheep hunters.

A third factor, which Williams did recognize, was fraud. In 1913, the new Game Act included provisions to minimize abuse of bounty regulations, and Williams attributed the decline in bounties that year to the increased vigilance in granting bounty certificates. Still, fraud was rampant and Williams spent considerable time refuting spurious claims: some submitted the same scalps twice, or several “scalps” stitched together from one animal; some argued that coyotes were actually “brush wolves,” an intermediate species that merited the $15 wolf bounty; others stretched coyote heads to make them look more like wolves; still others sought bounty on coyotes sent from Alberta, or caught in Washington State.
At first, Williams was encouraged by the thousands of coyotes submitted for bounty, and foresaw a day when declining bounty applications would signal the coyote's demise. That day was not forthcoming. Rather, in the mid-1910's, skyrocketing coyote numbers highlighted the bounty's ineffectiveness. It was not long before Williams put the pieces together. In early 1915, he conceded that “any permanent reduction of [coyotes] cannot be looked for in the present system.” He began searching for alternatives, and suggested that poison, “put out systematically” during times of food scarcity, “might be the means of destroying large numbers of these pests and eventually lead to their extermination.”

The next year, seemingly exasperated at a record 7,482 coyote bounties submitted (nearly double the previous year and 5 times 1913’s total), he wrote: “the Province is paying out a great deal of money which it can ill afford...and has not even the satisfaction of knowing that it is doing any good; in fact, it certainly looks the other way about. After paying bounties on these pests for some fifteen years it is not very hopeful to find they have multiplied very rapidly, and that as fast as they are killed others take their place....The extermination of the coyote is now almost as hard a problem as the rabbit was in New Zealand and Australia.”

Frustrated, Williams explored the possibility of infecting coyotes with sarcoptic mange. In Feb. 1915, an Alkali Lake rancher and personal friend sent Williams a clipping that described a mange inoculation experiment conducted in Montana. He responded enthusiastically: “Many thanks...I was very pleased to get [the clipping] as the question of how we are going to deal with the coyotes has been occupying a great deal of my time...There appear to be more than ever of them, and I am afraid...that they are going to cause no end of trouble, --- I should think that not a sheep in the country would be safe; also next nesting season they will play havoc with the grouse.” Williams took up the matter with J.B. Harkin, Commissioner of the Dominion Parks Branch, who expressed interest in the idea. Yet the two men's expectations would be quickly shattered. Harkin referred the matter to the Veterinary Surgeon-General, who advised against deploying it “under any circumstances,” due to the danger of it spreading to domestic dogs. Williams begrudgingly accepted the decision.

In 1916, a record 17,352 bounties were paid on coyotes, nearly two-and-a-half times more than the unprecedented number paid the previous year. “The whole of the Dry Belt simply swarms with these
pests," wrote Williams. "Not only have they practically cleaned up all the stock of grouse, killed fawns and the deer themselves by the hundred, but they have made the keeping of sheep in some parts of the Interior almost an impossibility." Williams' knew that his only system of control, the bounty, was a poor match for the problem, but in the midst of so many livestock losses, removing it would be political suicide. Having exhausted his resources, William looked hopefully toward natural disaster -- famine, disease -- for relief. "It does not," he wrote, "seem possible that they can continue in their present numbers."21

Williams' hopes did materialize, and coyote populations fell following a periodic crash in rabbit populations. At the same time, political changes forced him out of office. In 1918, following his dismissal, Williams wrote a letter to the B.C. Wool Growers Association. In it he argued that "the great majority of coyotes killed are not sheep-killers, the latter is very wary, and it takes a really first class professional to catch him... I believe it would pay to have such a man employed by the Department of Agriculture, to go from place to place, wherever his services were required, and trap these coyotes. I believe that more good has been done in the United States by these professionals than any other way."22 Williams' statement not only recognised the complexity of coyote predation, but by exonerating the "great majority" of coyotes, it reduced culpability from the species to the individual level. In a sense, Williams no longer saw coyotes as "vermin," an undifferentiated swarm warranting wholesale extermination, but as a varying bunch requiring targeted action. In another sense, he was simply trying to find a workable solution to the "coyote problem."

Williams was not alone in his opposition to the bounty. G.Gordon Hewitt, Dominion Entomologist and Secretary for the newly created Dominion Advisory Board on Wild-life Protection, undertook "extensive investigations" into coyote predation in British Columbia. Hewitt, who called coyotes the "enemies of wildlife," and "no respectors of persons," considered the bounty system an unqualified failure. Influenced by the recently established U.S. program, he recommended the "systematic" destruction of predators by government-paid hunters, perhaps soldiers returning from WWI23. According to the Game Warden's Report for 1918, Hewitt told the province that the Advisory Board was considering more effective predator control in B.C., "particularly in the Bridge River district," a popular big game area. "[T]he Advisory Board," states
the report, “came to the conclusion that the bounty system will not succeed in ridding any territory of predatory animals. Certainly all evidence seems to tend to this conclusion.”24 Similarly, Thomas MacKenzie, B.C.’s grazing commissioner, considered the bounties of “little use” in countering coyote predation. Although he did not dismiss the bounty entirely, he recommended the employment of government predator hunters, and the use of “wholesale poisoning,” the primary method deployed during his tenures in Washington State and Oregon.25

These men’s advice however, went unheeded. It was partly a matter of numbers, which remained the measure of success in many people’s minds. To equal the number of pelts turned in for bounty, the Game Department would require more predatory animal hunters than it could afford. The coyote bounty would continue for the next 35 years, except for a six-year period when Williams was returned to the helm.

Meanwhile, in the Fraser Valley, the provincial government competed with coyotes on two fronts: livestock (dairy cows, sheep and poultry) and game birds. To the Game Department, naturalists, and the "shooting public," the Fraser Valley was considered a “game bird district.” To the Department of Agriculture, parts of the region were “sheep breeding territories” or “dairy country.” These designations naturalized the presence of imported animals and criminalized the presence of coyotes.26

After touring the Fraser Valley in 1919, Dr. A. R. Baker, Chairman of the new Game Conservation Board, called upon constables to destroy coyotes. He noted “quite a migration” of the animals into the area that year, and a resulting decrease in game birds in the Rosedale area, and near Chilliwack. “That portion of the Chilliwack District known as the Camp Slough,” he lamented, “two years ago was one of the best pheasant territories. I am sorry to report that owing to the coyotes there are very few of these birds left.”27 Coyote migration into the valley might have been encouraged by the crash in rabbit populations upriver. Following food shortages in the Spring of 1917, dispersing coyotes might have travelled longer distances to find more abundant prey. This could have led them, in one, two, or three generations, into the Fraser Valley.
Rising populations in the mid-1920's provoked urgent calls to eliminate the coyote "menace" in the valley. The Game Board's 1925 report insisted that "steps must be taken to...keep a check on these animals, as undoubtedly they do untold damage to game birds in the region." The following year they were "reported to be still on the increase." By the end of the decade, however, coyote numbers had declined -- not because of the bounty, certainly, but perhaps because of rising interest in coyote fur.

In the 1920's, coyote pelts became increasingly valuable. Coyotes provide a long-haired fur that was considered too bushy for an entire garment, but was suitable as trim. Beginning in the 1920s, fashion designers increasingly accented their creations with fur collars and cuffs, and the price of coyote pelts rose. Hunters and trappers increasingly pursued coyotes in the winter months, when their fur was most luxuriant -- and before the next year's litter could be produced. Many trappers avoided summer hunting altogether, and instead "saved" coyotes until their fur grew thick. Winter mortality takes the highest toll on coyote populations, as it occurs after dispersal, and reduces the number of litters produced in the spring. Over several seasons, winter mortality could have affected coyote numbers.

Even as it reduced their numbers, high fur prices afforded coyotes some semblance of protection -- at least partially. In his report for 1929, J. G. Cunningham, then warden of the Lower Mainland region, argued that coyotes were "too valuable to be ruthlessly destroyed in our summer months, except in case of damage or menace to sheep-breeders' or farmers' stock." In the latter case, two coyote hunters, hired by restored Game Warden Williams, would "assist in clearing them out of that district." Williams had eliminated the bounty in July 1929, shortly after his return to office, and implemented, within the budgetary constraints demanded during the Great Depression, the approach he had suggested eleven years earlier.

Coyote fur, cheaper than most, survived the initial economic shock. In 1931, however, prices for coyote fur nosedived; all fur markets were "very unsettled," except that for muskrat, whose total catch doubled in a year. In 1932, only 170 coyote pelts were sold, down from a peak of 20,192 in 1927. Three years later, Williams retired, and the newly established Game Commission restored the coyote bounty, at a low rate of $2 per pelt.
At the same time, the Commission supported alternatives to the bounty system. Commissioners Frank Butler and J.G. Cunningham, the former Lower Mainland warden, worked closely with game associations and “interested sportsmen” to kill predators. In the Fraser Valley, game clubs held annual “crusades” against predatory animals and birds, and the Game Department supplied the ammunition.32

Like Williams, the Commissioners placed increasing emphasis on role of Game Wardens in killing predators, and included charts of “vermin destroyed” in each annual report. By this time, most in government felt that predatory animal hunters would do a better job than bounties, should enough trained personnel and funding be available. The bounty was kept on, as a stop gap measure, until an alternative could be introduced.33 Reports from the 1940’s acknowledged increasing demands for higher bounties, especially from “stockmen and agriculturalists,”34 yet argued that better results would be obtained by hiring “specially trained and properly equipped predatory-animal hunters,” repeating this phrase like a mantra in successive years.35 In 1947, the Game Department added a new Predator Control Branch, and five predatory animal hunters were hired and sent out to districts with predator problems.36

The Commission’s slow conversion of predator policy was encouraged by a new set of mentors: game biologists. These “scientific men” presented a a unified front against the bounty system, and a counterforce against the demands of the Game Department’s constituency.37 Their presence would change predator policy -- and coyotes’ lives -- irrevocably.

**Predator Control**

During the 1930’s the developing science of animal ecology offered new ways to understand population dynamics and predator prey relationships. It proposed a model of predator-prey coevolution, and suggested a positive role for predators in the maintenance of healthy prey populations. Scientific reports, based often on lengthy field studies, exposed the complexity of predator-prey relationships, and refuted solutions based on simple arithmetic. They also documented instances of predator scarcity, and the nightmarish consequences: prey overpopulation, denudation of range, and subsequent starvation and disease.
In B.C., the Game Commission had been informally cooperating with University biologists, especially fisheries biologists, since 1935. Ian McTaggart Cowan was one of the first wildlife biologists to work in B.C. Hired by the Zoology Department at the University of British Columbia in 1940, Cowan received his PhD from the University of California at Berkeley. There he had studied under Joseph Grinnell, who had led the campaign against poisoning predators in the 1920's. 38 Cowan worked with the Game Commission informally from the time of his appointment at the university. More formal arrangements were delayed until 1947, when the Game Department funded James Hatter, one of Cowan’s students, who was conducting his PhD research on moose in the central interior. In the same year, Cowan and his colleague Wilbur Clemens were hired as scientific advisors. In 1949, the Commission established a Scientific Branch, which included Cowan and fellow UBC zoologist Wilbur Clemens as scientific advisors, Hatter as game biologist, two fisheries biologists, and W.W. Mair as Supervisor of Predatory Animal Control. 39

From the first, there was tension between these new “scientific men” and the “practical men” who worked traplines, ran cattle, and hunted in the backcountry. This was especially apparent in the bounty debates of the late 1940’s. With the encouragement of men like Cowan and Hatter, and the data they produced, Butler and Cunningham became convinced of the need for predatory animal hunters and the abolition of the bounty. Game managers across the continent had abandoned and condemned the bounty as useless, especially in the “control” of coyotes.

Cowan’s own studies in the Rocky Mountains led him to similar conclusions. Cowan presented this perspective at the 1st Annual B.C. Game Convention, held in Harrison Hot Springs. In his talk, called simply, “Predation,” Cowan blasted the bounty system. 40 The bounty system “accomplished nothing,” and got the control program “absolutely nowhere.” He repeated the argument raised 25 years earlier by Williams and Mackenzie. Bounties only “cream-skim[med]” the easily-caught predators, in areas of high abundance. Once these were taken, bounty hunters moved on, leaving the experienced sheep killers alive and with less competition. “If a man is going to get a bounty for everything he kills, it is going to be very,
very difficult to keep him chasing the one [animal] that is doing the damage," noted Cowan. All predators
did not do the same amount of damage, he argued, and so numbers were no way of accounting for progress.

“In certain areas,” Cowan argued, “predators are beneficial and have a very real but incalculable value.”
Predators absorbed the surplus prey population and thus prevented overpopulation. Cowan had witnessed
the aftermath of ungulate overpopulation in Banff National Park. The elk had eaten “everything within nine
and a half feet of the ground,” leaving the mule deer to starve. Beyond preventing overpopulation, Cowan
considered the “net effect” of predation on game herd productivity to be “inconsequential.” The “critical
limiting factor is range,” he argued. Effective predator control, he believed, required “careful study” of the
condition of the range, harvest rates, and the relationship of predation to prey population dynamics.

Cowan considered predation on game and predation on livestock to be different matters. The latter involved
“intimate contact with man and a degree of change in the normal food habits of the predator.” In Cowan’s
model, stock losses occurred in a human controlled system, where ranchers determined the survival of the
fittest, culled the weak and sick of the herd, and prevented starvation. -- and where non-human predators
were superfluous. Cowan also considered killing stock feeders more “feasible” than killing predators who
consumed game. Livestock predation occurred in limited, more accessible areas, and involved only the few
animals who had developed the “prediliction and techniques” to take domestic animals. Cowan advocated
intensive predator control in response to livestock losses.

Cowan proposed a differentiated model for predator control, concentrated on livestock areas and heavily-
hunted areas. Control, he argued, should be focussed near population centres, rather than “dissipated over
remote areas where the game is not harvested up to present surplus.” (Cowan claimed that “80-90%” of the
bounty was paid on animals caught in northern regions.) In essence, Cowan’s proposal normalized coyotes
within wilderness areas, and criminalized them in areas of settlement. In separating agricultural and game
interests, he reinforced the notion that wilderness and rural areas -- and the wild and domestic animals that
inhabited them -- possessed fundamentally different natures. It was the nature of these systems -- wild or
domesticated -- that determined a coyote’s culpability. In theory, what distinguished a good coyote from a bad coyote was geography.

Cowan’s speech signalled the new direction of predator control. In this and subsequent conventions, Commissioners Butler and Cunningham would back up his argument, as would Dominion Wildlife Officer J.A. Munro, and game managers from the United States. Philip Eastman, who represented 38 fish and game clubs in the Interior, also threw his weight behind scientific predator control.41

Yet many who heard Cowan’s argument still pressed for increased bounty. Some disputed his logic. “Man is quite capable of taking care of the balance of nature without predators,” declared William Harrison, Chairman of the B.C. Sheep Breeder’s Association and a former member of the Game Conservation Board. Eric Collier, President of the B.C. Registered Trappers Association, wrote in a Cariboo journal, “When Dr. McTaggart Cowan or Mr. John [sic] Hatter...present the theory that predators are an evil necessity in the maintenance of nature’s delicate balance, they are probably right; were it not for the extremely salient fact that the schemes of Mother Nature failed apparently to take into consideration what happens when the human element enters the picture...I think most of my readers will agree with me that at present we need neither wolves or coyotes to help maintain Nature’s balance.”42 Others claimed that “natural conditions” no longer held for game animals, since they benefitted from increased predation on livestock. A rancher who thirty years earlier had claimed that his coyote pelts were really “brush wolves,” argued that “man has stepped in and has seriously offset the nature balance insofar as he has produced livestock which has given a rich harvest, you might say, to predatory animals...with more feed they have more chance of reproducing.”43

Most however, argued for the bounty on practical terms. Stock breeders faced an “emergency” on the range, and needed immediate action to reduce depredations on livestock. Trappers suffered “very, very heavy losses” from coyotes preying on muskrat and beaver. The absence of young men and the shortage of ammunition, claimed bounty advocates, had increased coyote numbers dramatically during the war.44 With fur prices at rock bottom, and the bounty at only $2, no one, they claimed, had the incentive to kill coyotes.
Bounty advocates wanted the reward raised to $5, which they said, would encourage “Indians” to hunt coyotes.

In response, Butler asked why the farmers couldn’t kill their own coyotes, and they argued that they had little time to do so. They also claimed predator control as a public right. Mr. Bayliff of the B.C. Federation of Agriculture maintained that farmers were “as much entitled to protection from predators as the bank that was held up the other day was from gunmen.” Furthermore, they could not trust a handful of predatory animal hunters to clear the province’s range of coyotes. Collier wrote, “Predatory animal hunters can never properly solve the situation here in the Interior or northern regions of the Province, for it would be impossible -- from a cost viewpoint -- to place enough such hunters in the field who are intimately acquainted with the terrain over which the wolves and coyotes range.” On this latter point, he was correct. When the province undertook predatory animal control, they would rely not on predator animal hunters, but on weapons of mass destruction.

“"It is no longer possible for us to accept the old thesis that the only good predator is a dead one” declared W. Winston Mair, in his introductory address to the 1950 Annual Game Convention. Mair, a game biologist, had been hired the year before as the new Supervisor of Predator Control, and charged with implementing the Game Department’s new “scientific” approach to predator control. At the same time, he was compelled to alleviate the “emergency” conditions reported by stockmen. The irony of his position reverberated through the actions of his division. While he dismissed the adage, “the only good predator is a dead one,” his program would kill more coyotes than any in the history of the Province.

The Game Department had for years promoted alternatives to bounties, and now it had to make good its claims. The problem of scale immediately presented itself, and rendered its call more localized, targetted predator control useless. Mair’s staff of 8 could scarcely cover 336,000 square miles. B.C. was too large; selective killing required more predatory animal hunters than it could afford. Commissioner Cunningham
admitted that “it is very doubtful if we could ever employ a sufficient number of trained personnel to adequately cover the whole Province.” Mair instead was faced with producing “maximum kill for minimum effort.” To cure the stockmen’s ills, Mair prescribed a heavy dose of poison, broadcast throughout the Interior.

Mair’s master plan employed a concentric model, with ground zero centred on farmhouses and towns: Predatory animal hunters were “to attempt near-complete control in agricultural and built-up areas; to attempt partial-to-complete control in game areas, and to attempt some light control in wilderness areas to protect trappers and big-game reserves, at least until such time as research can demonstrate the exact need.” They would do this using traps and cyanide dispensing “coyote getters,” and — most significantly — a new poison, sodium fluoracetate, or Compound 1080.

Compound 1080, developed by the U.S. Fish and Wildlife Service for rodent and predator control, is a tasteless, odourless, and highly lethal salt. Water-soluble, Compound 1080 is easily injected into baits and spread on grain. Small concentrations will kill most animals, and it is particularly toxic to members of the canine family. Unlike cyanide, it is a slow-acting poison, producing vomiting, convulsions, auditory hallucinations, and “abnormal facial sensations.” Victims may suffer for 24 hours and travel miles before dying. Compound 1080 degrades very slowly in their corpses. It is only destroyed by fire.

Coyotes succumbed to Compound 1080 because it was hard to detect. Coyotes could smell strychnine even in the most carefully handled baits. This new poison could not be smelled, tasted, or seen. As such, it claimed mature coyotes as well as juveniles. Moreover, poisoning was done in the winter, which would have reduced breeding populations.

Compound 1080 would be the keystone of Mair’s predator control program, with coyote getters and traps used on a supplementary basis. In his report for 1950, Mair reassured readers that poison baits would be placed with “the utmost caution and supervision,” at “stations” that were carefully chosen and sign-posted. The “stations” were usually pieces of horsemeat laced with Compound 1080. Although Mair allowed some
trappers and farmers permission to use poison, he intended in time to place all such activities "at least under the supervision of Department personnel." 51

In November and December 1950, Mair’s team set up 153 poison stations in the Interior. In March they returned to dismantle them, estimating that 4,000 to 6,000 coyotes had been killed. They killed another 546 coyotes in 1951 with traps, rifles, and coyote-getters. The following winter, at least 50 additional stations were installed.

By the end of 1952, G.A. “Al” West, Mair’s successor, could claim in his report that “[o]n the whole, coyote numbers were under control. Only in isolated instances were coyotes more than a nuisance in areas that are treated annually with poison stations.” 52 (K43) At the annual conventions, lengthy debate over predator control was stilled; delegates instead listened to concise reports from Mair or West, recounting their success in the field. At the 1954 convention, Collier, who had vigorously defended the coyote bounty only six years earlier, introduced a resolution to remove it. “I don’t want anyone to think I’m a turncoat,” he said, “[but] as far as coyotes are concerned, these chaps have done a very good job.” 53

The Game Department had very quickly achieved their goal: to decrease the density of the species to “a level concomitant with good management,” with the latter determined largely by livestock and game interests. Complaints remained low, and by 1955, Interior ranchers and farmers were asking the Game Department to withhold poison, as “the coyote population was too low” and rodents were overrunning their fields. 54

With success at hand, poison stations were set-up in other areas, and by the end of 1953, 768 stations had been established throughout the province. 55 With the ranching belt quieted, West turned his attention to predators -- mainly wolves, but also coyotes -- in northern game areas. The following year 1,911 stations were placed, and in 1956 over two thousand were baited, most of them dropped from airplanes onto northern regions, islands, inlets, and other inaccessible areas. 56 West wrote in 1955 report that “aerial control...is the only means by which a tremendous area can be treated in an adequate manner.” 57
West also kept his eye open for increasing coyote populations elsewhere in the province, and noticed a few more frequenting the Fraser Valley. "Coyotes may well become a problem in the Lower Fraser Valley," he wrote, "especially on the north side of the river. A total of twelve, nine more than in 1951, was destroyed [this year (1952)]." The following year 24 coyotes were killed in the eastern half of the valley. West wrote "this area is quite well suited for intensive control measures, although the use of poison is very restricted." These measures may have been effective -- or coyotes may have grown better at eluding them -- as the numbers of coyotes taken declined from twenty-seven in 1954, to thirteen in 1956.

**Problem Animals**

Despite success in reducing overall coyote density, by the mid 1950's, predator control was stymied by its inability to lay poison or shoot freely in the populated areas. By the mid 1950's, West was wrinkling his brow over the problem of coyotes moving into settled areas. "We are faced," he wrote, "with exerting control measures within a highly populated area; consequently we cannot use any means of mass destruction." He considered the difficulties posed by "the type of coyotes which have either invaded heavily settled areas or which have been enveloped by settlement. They are difficult to eliminate, as one cannot use poison or similar control methods under settlement conditions." Coyotes were not easy to trap or shoot. Poison was the only effective means of reducing their population. This may have been acceptable on the open range, but in the more densely populated areas of the Fraser Valley, it was off-limits.

Confounding this logistical problem was growing concern over the use of Compound 1080. Biologists within the Department challenged the use of Compound 1080 on the grounds that it poisoned non-target species and entire ecosystems. In northern areas, baits were often dropped onto lakes, and were not recovered due to the expense of air travel. When the lakes thawed, left over bait would fall in and contaminate the water system. Local residents avoided water and berries found near baited lakes. A variety of furbearers, game animals, and domestic animals were vulnerable to the poison.
One non-target species was the domestic dog. In August 1963, the newly appointed Chief of the Conservation Officer Service wrote to regional inspectors: “You must do your utmost to minimize 1080 baiting for complaint animals near settlements...As you know, nothing infuriates people more than to witness the agonies of their dying dog and to realize that poison put out by us is responsible. Granted that stock protection is important, but we may lose the whole 1080 use [because of] public resentment.”

Biologists also questioned the wisdom of such extensive predator control, citing instances of ungulate overpopulation and overbrowsing due to lack of predation. In a 1961 article in *Canadian Audubon*, wolf and coyote researcher Douglas Pimlott described the overpopulation of moose in the northern part of B.C. Overbrowsing and starvation were the consequences of moose proliferation, and one cause, he suggested, was the predator poisoning program.

Pimlott’s article, and his speech in the same year at the Federal Provincial Wildlife Conference, condemned poisoning programs. Head of an innovative wolf and coyote research program, established in 1957 by the Ontario Department of Lands and Forests, Pimlott singled out B.C.’s efforts as by far the most “ambitious” and the most culpable in Canada. His arguments echoed those made by Cowan fourteen years earlier. Pimlott argued for “intensive specific control rather than extensive general control,” and complained that no one had conducted “a single wolf or coyote research program to determine the significance of predation on livestock or on game populations.” Neither had studies been done to determine losses among non-target species.

Pimlott also noted that B.C.’s poisoning program spent more money annually than had the bounty system, and that much of the poisoning campaign was conducted in the northern latitudes, in sparsely populated areas. He characterized it as a “demand” program, unduly influenced by stockmen, trappers, guides and other “pressure groups,” and governed not by the oft repeated “control when and where needed,” but by poisoning “when and where wanted.” He also considered the single-focus mandate of B.C.’s Predator Control Division self-perpetuating and dangerous. Pimlott concluded that “to a large extent, the program
cannot be justified. I consider that it constituted a greater abuse of conservation principles and a greater waste of public funds than the bounty system.”

Opposition to the Province’s massive poisoning program increased as wolves and coyotes gained public sympathy. Although positive portrayals of predators can be found as early as Ernest Thompson Seton’s work, it would take two or three generations for pro-predator sentiments to galvanize. The conservation movement in the 1940’s produced classics such as Leopold’s *Sand County Almanac*, and, on coyotes, Sally Carrighar’s *One Day at Beetle Rock*, and J. Frank Dobie’s *The Voice of the Coyote*. Yet it wasn’t until the 1950’s and 1960’s that wild animals approached their current popularity. Disney produced imaginative wildlife documentaries, featuring stunning photography and positive portrayals of predators. TV programs such as *Wild Kingdom* (1961) depicted predation as an exciting facet of nature, and wildlife became a common theme for TV series such as *Gentle Ben* and *Flipper*. Books such as Lois Crisler’s *Arctic Wild* (1958), Adolph Murie’s *A Naturalist in Alaska* (1961) and Farley Mowat’s *Never Cry Wolf* (1963) praised wolves and helped sway public opinion to the side of predators. Rachel Carson’s famous *Silent Spring* (1962), widely cited as the founding text of the modern environmental movement, documented the systemic effects of pesticides and incited widespread concern over the use of poisons.

In 1963, the Fish and Game Branch publication, *Wildlife Review*, reprinted Leopold’s “Thinking Like a Mountain,” the epiphany of a predator hunter who, in the dying eyes of a wolf, recognizes the tragedy of his actions. Change for the Game Department would not occur in a moment, but the publication of the essay reflects a period of transformation in ideas and policies around predators. In 1961, use of poison was banned in wilderness areas. In 1963, the Predator Control Division was dissolved, and responsibility for predators was transferred to regional offices.

In March 1964, B.C. Game officials attending the annual North American Wildlife Conference heard from a second Leopold who had quite a bit to say about predator poisoning programs. Starker Leopold (Aldo’s son) led the U.S. Department of the Interior’s Special Advisory Board on Wildlife Management, a five member committee that had recently been charged with reviewing the U.S. predator control program. The
Leopold report offered a thorough condemnation of PARC's poisoning program on both scientific and economic grounds. It criticized the program as costly, unnecessary for the maintenance of wildlife populations, and unproven as a means of reducing livestock losses. It found that the scientific bases of the program were questionable in theory and disregarded in practice. The Fish & Game Branch circulated the Leopold report to all biologists, regional inspectors, and supervisory and technical staff involved with predator control.

The report not only reshaped predator policy; it helped redefine the identities of predators. In 1966, B.C. reclassified coyotes, wolves and cougars as “big game animals,” protected by seasons, bag limits, and restrictions on hunting methods. Hatter explained that “our biologists felt that those animals should have game or fur animal status, rather than being designated as predators, which sometimes has a vermin connotation.” With the elimination of “predators” from the Fish and Wildlife Branch’s lexicon, coyotes, as a species, entered the wildlife mainstream. The province no longer suppressed a dangerous class of animals but instead prosecuted deviant individuals, who were termed “problem animals.”

In the same year, Fish and Game Branch officials met to “clarify the function” of the predator control program. In a memo outlining their conclusions, they redefined predator control policy as “local population control where a species is causing significant damage to other resources or crops or where it endangers human health or safety.” They added that “control should be limited strictly to the troublesome species, preferably to troublesome individuals....It does not follow that coyotes in an area must be eliminated or that a cougar passing through a given area must be destroyed. The emphasis on our services is local application of our stated policy of control when necessary but no unnecessary control.”

Eight years later, the Fish and Wildlife Branch formalized its relationship with local agricultural and wildlife interests by creating one provincial and nine regional “problem animal” advisory boards. In the Fraser Valley, the Lower Mainland Problem Animal Advisory Committee reaffirmed that predator control activities would be conducted only in response to complaints of property loss, or threats to human safety. Conservation officers were to undertake the “elimination of specific problem animals” or the “reduction of
local problem animal populations,” only as a last resort, and after thorough investigation. Sometimes the latter was addressed by loosening hunting and trapping regulations. Other options, including fencing and supervision of livestock, and removal of carcasses and other attractants, held the stock raiser partly responsible for attacks on livestock.

Conservation officers could use poison -- coyote getters in snow-free periods and Compound 1080 in winter -- in “less settled or wild areas.” In the Fraser Valley, poison was restricted to the eastern part of the valley, because of the density of settlement elsewhere. In December 1978, the Minister of Environment Rafe Mair introduced a temporary moratorium on use of poisons for predator control, following controversy around proposed wolf poisoning in the north. Although the moratorium ended on Jan. 31, 1980, the province’s cyanide use was permanently suspended, and Compound 1080 was not used again in the Fraser Valley.

With the growth of environmental consciousness and sympathy for predators, predator control moved from a grand scientific model to localized solutions, from the condemnation of the entire species to the isolation of deviant individuals. With these more reactive and site-specific control efforts, the location of coyotes became even more important, because deviance was to a good degree spatially-defined -- in general, by proximity to settlement and in practice, by public complaint. Control options were also influenced by geographic factors, such as the density of settlement. Guns, traps, and certainly poison could not be used in populous areas, for fear of harm to people and other animals. This led to a basic contradiction: coyotes were least able to be controlled in places where they were most problematic. The apex of coyote transgression -- in a crowded neighborhood, mingling with children and dogs-- was often beyond the reach of the province’s conservation officers. As coyotes gained acceptance as part of nature, the transgressions of coyotes and the borders of wildness would become more closely-defined -- and in another sense, more contested.

1Herb Manuel, “Coyote and Wolf,” in Darwin Hanna and Mamie Henry, Our Tellings: Interior Salish Stories of the Nlha7kapmx People, Vancouver: UBC Press, 1995, p. 44.
2Hereafter referred to as “Game Department.”
9It is likely, though, that many coyotes, passed off as wolves, were turned in for bounty prior to this time. In some years, those who submitted pup pelts were rewarded $1 each. British Columbia. Sessional Papers. Public Accounts, 1892-1905.
11In 1903, Yale District was divided into three districts: Yale, Nicola, and Kamloops. This percentage reflects skins presented in all three districts. Figures are taken from British Columbia. Sessional Papers. Public Accounts, for the years stated.
12The Game Department began as a one-man operation, and remained that way until 1913, when newly-imposed hunting license fees allowed the hiring of deputy wardens. Williams remained responsible for all policy decisions throughout his tenure.
15Arguments for the existence of “brush wolves,” and mention of the stretched head technique, can be found at B.C. Archives (BCA), GR0446, Box 81, File 3 and BCA, GR0446, Box 63, File 5.
18Correspondence between Williams and the rancher can be found at BCA, GR0446, Box 61, File 2. For the article on mange inoculation, see M. A. Cromwell, “Spreading Disease Among Coyotes,” Breeder’s Gazette, Jan. 21, 1915. Williams also mentioned his interest in sarcoptic mange in his Game Warden’s Report for 1915, p. O13.
19Williams to F.L. de Hart, State Game Warden, Missoula, MT, Feb. 18, 1915; Williams to J. B. Harkin, June 30, 1915; Harkin to Williams, July 7, 1915; Williams to Harkin, July 15, 1915; Harkin to Williams, July 23, 1915; Williams to Harkin, July 31, 1915. BCA, GR0446, Box 61, File 2.
22Hewitt, Conservation, p. 199, 204-6.
27But provincial coyote policy was not driven by circumstances in the Fraser Valley. For most of the century, coyote numbers remained small in this area compared to the Southern Interior, the swath of dry grasslands which was BC’s main ranching region and the coyote’s ancestral home. Until the 1970’s, most complaints about coyotes came from the Interior, and these largely determined both the price of bounties and the methods and intensity of control. The Fraser Valley participated in predator control programs, and its wardens kept after “vermin,” including coyotes, but it remained marginal to coyote policy discussions and decisions.


33 This was openly stated in annual reports beginning in 1943.


40 A transcript of Cowan's talk, and related comments, can be found at British Columbia. Game Department. *Game Convention: Report of the Proceedings*, Victoria: Don McDiarmid, 1947, p. 34-45, and p. 148-158. All quotes attributed to Cowan can be found in this transcript.


48 Dunlap writes that "the normal lethal dose for coyotes was a few mouthfuls of horse meat treated at the rate of 1.6 grams of Compound 1080 per 100 pounds of meat." Dunlap, *Saving America's Wildlife*, p. 112.


50 "Coyote getters" are spring-loaded devices that propel a cyanide capsule into the mouth of an animal when it seizes bait.


64C.E. Estlin, Chief, Conservation Officer Service, to G.A. West, et.al., August 1, 1963. BCA GR 1027, Box 145, File 3.
68Pimlott, “Wolf Control,” p. 145-52. Quote is taken from p. 150. Ian McTaggart Cowan was on the Canadian Audubon Society’s Board of Directors at the time of publishing.
74And later, “problem wildlife.”
76Hatter, *Politically Incorrect*, p. 105. The same month, the Ministry of Recreation and Conservation was disbanded, and the Fish and Wildlife Branch became part of the newly created Ministry of Environment.
CHAPTER 6

PROBLEM WILDLIFE

The first coyotes in the Fraser Valley encountered a developing agricultural landscape, one shaped by dreams of agrarian bounty and made, for the most part, by hand. Coyotes today move through the twilight of that vision, a rural-urban patchwork half-buried “under the concrete foundations of industrial sites, shopping malls and housing estates.”¹ They negotiate a more rapidly changing environment, where machines tear through land, lay down pavement, and create neighborhoods in weeks; a receding countryside where open fields shrink before pavement.

Not that they seem to mind. Neighborhoods provide plenty of forage, and greater protection from traps and guns, as do the smaller “hobby farms” that have been carved out of larger holdings. Although coyotes have adapted quickly to this new landscape, many residents have been less quick to accept them in their midst.

“There’s coyotes all over,” claimed Dave Gunn of Tsawassen, in early 1979. “I see them every day. Just about every night you can hear them howling.” These are not the enthusiasms of a nature lover. They are the complaints of a farmer, who had just shot three coyotes in a neighboring field.

Gunn was not alone in his views. Despite growing sympathy for predators in the 1970’s, coyotes remained controversial. For many Fraser Valley residents, coyotes were still bete noires, whose shadows only lengthened as coyote populations recovered and increasingly infiltrated urban and suburban communities. This new coyote was “closer, louder, bolder” and perhaps, unstoppable.²

What was it about coyotes that bothered people? Predation and trespass were the basis of most complaints, and in many minds these were equivalent. Coyotes spotted in a field or yard provoked immediate concern for animals and children. In another sense, coyotes who preyed on pets and livestock crossed an imagined
barrier protecting domestic animals from predation. This was the boundary that separated suburban neighborhoods from wild animals, that distinguished pasture from prairie -- a jurisdictional boundary where certain laws of nature were suspended and predation was a crime.

This chapter explores the geography of coyote intolerance in the Fraser Valley, as expressed in newspaper articles, and more thoroughly in the Ministry of Environment’s Problem Wildlife Complaint system. While newspapers relay opinions, and lively reports of coyote encounters, it is in predator control that the negotiation of boundaries between coyotes and human settlement is most transparent. The ministry’s new reactive, complaint-driven predator control program reduced this process to the scale of individual grievances. As a result, the record of complaints reveals both the contours of predator control and the comfort zones of individual complainants. Not that the two were synonymous -- ministry staff often disputed complainant’s definitions of transgression, and, in an interesting reversal, suggested complainants take responsibility for attacks. The grievance-driven system challenged the ministry to define transgression more precisely, on a case-by-case basis, than ever before. Its definitions would often fall short of the demands of vocal coyote opponents.

Invasion of the body snatchers (?)

“I think we’ve been invaded by a bunch of coyotes,” said Alderman Bill Blair, at a Langley Township Council meeting in 1976. Indeed, the number of complaints against coyotes in the Fraser Valley rose dramatically in the late 1970’s. In 1979, the Ministry of Environment received 262 complaints from the Fraser Valley, five times more than they had four years earlier. This increase reflects not only greater numbers of coyotes, but their more frequent appearance in proximity to humans, and in places deemed off-limits. In the many articles on coyotes published by local newspapers since the late 1970’s, the “where” of coyotes symbolized the extent of their power.

“I’ve seen them right across from the Municipal Hall,” declared Stan Ellis, also from Tsawassen. “They have moved in, there’s no question about it.” The appearance of coyotes on main streets and porches, near out buildings and barns prompted not only alarm, but a re-estimation of the wild dog’s power. Animal
control officer Jack Lay, on the eve of his retirement, claimed that coyotes “have adapted so well to living in urban areas and sub-divisions that...they are virtually a super-coyote...they are doing things that were unheard of ten years ago.” Coyotes killed Matsqui farmer Bill Stirling’s ewe “only 70 feet away from [his] main farm building,” which he attributed to “the coyote’s increasing boldness in populated areas.” “What we have here,” explained Stirling, “is an ‘urbanized’ coyote, not behaving like a natural animal.”

Other comments were less philosophical, almost geopolitical. Peter McClellan of East Delta called the Fraser Valley a “breeding den” for coyotes and suggested they be confined to Burns Bog. Coyotes could use the bog as a refuge, he suggested, but “when they come out, they get nailed.”

Fred Glasbergen, president of the Lower Mainland Sheep Producers Association urged continued use of Compound 1080 to “keep the Fraser Valley as a farming area, and not turn it over to the coyote!” For these men, the struggle against coyotes was a contest for space, and a defense against encroachment.

For others, it more resembled guerrilla warfare: “Anywhere there’s a bush or a ditch, you’ve got to watch out,” said Province newspaper carrier Debbie McClusky, who recalled an encounter with two coyotes one morning: “They were a car-length away...I could tell by their eyes they were wild. I banged a couple of Provinces together and they took off in a flash.”

Adapting to coyotes

While the coyote controversy made headlines, it also inspired a scientific study of coyotes in the Fraser Valley. For three years, Knut Atkinson, a graduate student in the Department of Animal Science at the University of British Columbia, tracked coyote movements by radio collar, examined coyote carcasses, and collected hundreds of their droppings. He also interviewed half of the valley’s sheep producers. His study, completed in 1985, painted a much different picture of coyote predation.

Firstly, it showed that farm animals were a minor part of the coyote diet. The 862 droppings he collected contained a lot of voles but very few traces of livestock. Cattle, sheep, pig, and chicken comprised only 4.3% of the total volume, and sheep accounted for only 0.2%. Secondly, it revealed the presence of many
transient coyotes among the Lower Fraser Valley population. Transients can be seen as both surplus populations and ready replacements should resident home ranges fall vacant. They allow for stability in predation regimes. "With lethal predator control," he wrote, "losses may decrease for a period, but more coyotes can move into the area and losses may then resume."¹²

Instead of removing coyotes, Atkinson recommended removing livestock from the open range: securely fencing land, keeping sheep in "predator-proof" enclosures -- either corrals or buildings -- at night, and disposing of carcasses properly. Atkinson problematized the expectation that sheep, which have been "bred for docility and easy management," and are "basically defenseless against predator attack," should be safe on open range. Their only instinct is to flee, he argued, and in "non-predator proof fenced pasture [they] are essentially captive prey."¹³

Atkinson's recommendations portrayed sheep farms not as normative environments whose purpose was violated by coyotes, but as flexible spaces that could be altered to create a less attractive environment for coyote predation. He suggested that the geography of sheep raising, not of coyote predation, was more important in determining the extent of losses. He proposed that farmers adapt to the presence of coyotes.

Atkinson's report did not dampen the headlines, or save coyotes from gunshot or tabloid clappers, but it did resonate with ministry officials and would echo through conservation officers' response to problem wildlife complaints.

**Problem Wildlife Complaint Forms**

While press accounts sensationalized pet-nappings, livestock deaths, and a growing "coyote problem," the Ministry of Environment maintained a more thorough record of complaints. On a daily basis, local ministry staff recorded and arbitrated the public's discomfort with coyotes. They fielded phone calls and provided information and advice. They decided, on a case-by-case basis, whether to intervene, in which case conservation officers visited complainants and prescribed a course of action. Sometimes, they decided to
kill coyotes, and half the time, they succeeded. Problem wildlife complaints were not public statements, they were confidential requests for assistance and expressions of concern.

Although motivated by human discomfort, the ministry’s actions were characterized as responses to “problem wildlife.” Like earlier models, the construction of “problem wildlife” both externalized and normalized the uneasiness that many farmers, stock raisers, suburbanites, and pet owners felt around coyotes. Locating the “problem” in individual animals suggested that coyotes were either good or bad, that exploring back yards and eating chicken were lifestyle choices, rather than common, reasonable responses to their environment. In this way, it further criminalized coyote foraging strategies and use of human space. “Problem animals” were those who, in the course of making a living, crossed varying and invisible barriers: the ownership rights that shielded livestock, the comfort thresholds of suburbanites, the personal space of pedestrians, the property lines of homeowners.

Problem Wildlife Complaint forms reveal the specific nature and location of these limits. In documenting coyote transgression, they mark the spontaneous and often unstable boundaries set by livestock owners, hobby farmers, and suburbanites, and the sometimes different limits enforced by the provincial government. At the same time, the complaint forms afford us a glimpse of coyote’s lives and interests in rural and suburban contexts. Problem animal complaint forms are both records of transgression and accounts of engagement between coyotes, the public, and the provincial government. They pinpoint both openings and closures in the human-coyote interface, and allow us to map both public and provincial (in)tolerance of coyotes.

Complaints can be divided into two broad categories: concern for property, particularly livestock, and protection of personal space and safety. Predation on dogs and cats falls between these categories, depending on the role of the animal and the nature of its surroundings. For instance, a sheep dog in rural Aldergrove is an economic asset, a working animal as well as a family friend; whereas a housecat in a Surrey apartment complex serves as a companion, with little economic value. Livestock and pet safety complaints involved killings, maulings, and harassment, as well as perceived threat of injury/potential for
harm. Human safety complaints were largely unfounded. Most involved proximity of coyotes, coyote use of property, as well as unexpected and sometimes aggressive encounters. Others would be better classified as “nuisance” reports. Two other types of complaints were significant: reports of injured coyotes, and misidentification of dogs as coyotes, or coyotes as cougars or other (usually more dangerous) animals. The complaint forms I examined were those deemed serious enough to warrant a visit by a conservation officer. The location of complaints and control responses can be seen in Figure 1 and Table 1.

Livestock

I examined 215 complaint forms related to livestock from 1991 to 1999. Half of these (108 forms), on which the following discussion is based, were from the southwest portion of the Fraser Valley, extending from the Fraser River south to the international border, and from Matsqui west to the Strait of Georgia.

Most of these complaints were made in springtime, and most (nearly 70%) involved loss of animals. Sheep loss -- mostly lambs - was the most frequent complaint. Calls concerning cows were common, as were those concerning goats, poultry, dogs, and horses. In the Aldergrove area, coyotes killed four fallow deer, and in Surrey, they killed a newborn llama. Sometimes complainants wrongly attributed the deaths of livestock to coyotes. A White Rock woman thought coyotes had killed her calf, but the ministry investigator determined that it had died on its own. Coyotes kill sheep in characteristic ways: they bite their throats, and hold on until the animal suffocates or dies from hemorrhage. Conservation officers can distinguish coyote kills from those of dogs, whose attacks are much more messy, and who often savage several animals. For instance, an Aldergrove man lost seven calves in a week, reportedly to coyotes. A conservation officer examined the calves and determined that they were killed by dogs.

Others complaints alleged harassment: people claimed that coyotes had “come after” their dogs and goats, “spooked the horses,” or bit the legs of their cattle. Many such complaints recounted aggressive actions, but others involved mere proximity. A Chilliwack woman reported coyotes “mingling” with her cattle; a Langley caller reported coyotes “hanging around” the calves, and a Surrey man complained about “coyotes coming up to the barn, trying to get goats and [staying] right around the house all through the day.” A few
miles away, another man found “coyotes coming into the barn with livestock.” Others reported coyotes jumping over and digging under fences. For some, spotting a coyote in the field, or hearing their howls at night, was enough to send them to the telephone, to report their fears to the ministry. Many of these people were afraid for their animals. Others demanded preventative action when neighbors’ stock was taken. Although most complaints pertained to farm animal loss, some valley stock raisers shared their suburban neighbors’ concerns. Some complainants who lost stock feared for their pets and children; conversely, those who lost pets kept close watch on livestock.

Upon investigating some complaints, CO’s dismissed them outright. A Matsqui women claimed that coyotes were harassing her cattle, but the conservation officer took no action, noting that “coyotes are just at the back of their place.” Similarly, a Surrey man reported coyotes were “after” his sheep, but the investigating officer maintained that the “coyotes were not doing anything.” A Richmond man complained of coyotes harassing his cattle, but the conservation officer noted “the coyotes were just out in the fields.” Given the constraints on shooting and trapping, and on their time, conservation officers no longer considered trespass a reason to kill. When coyotes came near barns, however, they did take action. They shot “cracker shells” to discourage coyotes from approaching the Surrey man’s goats. They told the second complainant to shoot any coyotes he found entering his barn. Coyotes in the fields were sometimes held culpable. An Aldergrove man who saw “coyotes in his fields all the time,” lost 10 lambs and three calves one winter. A conservation officer shot twin male coyotes on his property.

In confirmed cases of harassment or predation, no simple correspondence existed between severity of losses and ministry response. Coyotes who killed animals were sometimes held blameless and those who chased cattle were shot. Several coyotes were killed for harassing livestock, but when coyotes killed three lambs and two sheep on a Matsqui farm, no action was taken against them. Instead, the complainant was told to coyote-proof his property. Harassment and mortality complaints yielded similar percentages (44% and 52%, respectively) of lethal response and the same percentage (29%) of coyote mortality. All coyotes who harassed livestock were candidates for removal; actions taken against them depended more on
geographic features -- the condition of the farmer's fence, for instance, or the density of the neighborhood -
- than on the nature of the coyote's "offense."

Many complaint sites were "unsuitable for trapping," because they were too small, they afforded too much
"public exposure," or they were home to many dogs. Likewise, shooting was problematic in more densely
settled areas and in the context of local firearms by-laws. Several complainants did not want traps on their
land, and two people wanted traps removed. Conservation officers recommended fencing and other non-
lethal measures in many of these cases.

Conservation officers attributed many complaints to inadequate fencing. Thirty complainants were told to
either build fences, fix the ones they had, or install electric wiring to prevent coyotes from crawling
underneath. As in Atkinson's report, this reassignment of blame is significant because it shifts
responsibility away from coyotes and onto complainants. It recognizes that complainants are complicit in
the loss of their livestock, and challenges them to physically manifest the segregation they seek from
coyotes. It also signals a change in predator control operations, broadening the role of conservation officers
from exterminators to troubleshooters.

Yet even when responsibility was given to the complainants, conservation officers still shot coyotes. A
Langley resident who complained of poultry losses received a visit from a conservation officer, who shot
an immature coyote and advised the complainant to shut the chicken coop door earlier in the evening. In
response to an Aldergrove deer farmer, a conservation officer wrote: "I set a trap but told [the complainant]
he would have to fix his fence." Another Aldergrove resident lost a sheep to coyotes. The conservation
officer set a leg hold trap, but assigned responsibility for the attack to "improper fencing."

More coyotes were trapped than shot, although trapping efforts were successful only half the time.
Conservation officers set traps in 42 instances, compared to only 12 responses with rifle. Many coyotes
who were shot had been "called" back to the property with a kazoo-like device that sounds like a dying
rabbit.
Most coyotes killed were adult males and adult females. Of the 81 animals shot and trapped, thirteen were juveniles, and only one was "old." Of course, the coyotes killed were not necessarily the offenders.

Although the ministry blamed individual "problem animals" for livestock deaths, they determined guilt by association. Any coyote who passed by the scene of the crime, or responded to a coyote call, could be shot; any coyote who investigated bait could receive the bite of a leg hold trap. The death of any coyote satisfied complainants, at least until the next sheep went missing. Traps often captured more than one coyote. One trap snared eleven coyotes, equal to the number of sheep that had been attacked. Another killed two raccoons but no coyotes. A Langley woman asked the ministry to remove traps on her property, as her cattle kept stepping in them.30

Complaints do not record all attacks. Some stock raisers accepted coyote predation as a cost of business, and did not request ministry action. Not everyone reacted with a sense of urgency. A Cloverdale woman reported the loss of one sheep, but added there was "no hurry" to investigate. The ministry advised her to call "if she had any more problems." Three weeks later she phoned to say that the coyotes had not returned.31

Property damage
Six complainants reported coyotes chewing on plastic irrigation lines, or in one instance, tearing up plastic covering a field. These actions merited the harshest punishment. In all cases, conservation officers attempted to trap or shoot coyotes, although they were successful only half the time. In Matsqui, an adult male coyote was shot; two years later, five coyotes were trapped at a neighboring farm. Coyotes that dug up bulbs, however, were not pursued.32

Personal space and safety
A second order of complaints documented transgression into human space, where economic loss was not a concern. Many involved anticipated or actual coyote predation on pets, while others alleged or anticipated coyote aggression towards humans, especially children. For some complainants, the presence of coyotes
near their homes -- or within earshot -- warranted ministry action. Others reported sightings of coyotes, or general information on their whereabouts. I looked at 48 complaints, from throughout the Fraser Valley.32

Some callers simply phoned in coyote sightings, as if obligated to inform the ministry of the animal’s whereabouts. An Agassiz woman called to say that “coyotes [were] seen quite often in [the] area.” An Abbotsford man reported that a coyote had crossed a road and “went into a field near Marshall and Gladwin Roads.”34 Some sightings provoked action. A New Westminster man reported a coyote in Moody Park, and a conservation officer went to the park and chased the coyote away.35

Other sightings prompted specific concerns. A man at Harrison Hot Springs complained of 10 coyotes who had been in the area for a month. He was “worried about his dog [and] very concerned [that] the coyotes are coming too close.” Another complaint form stated that an Abbotsford man “has coyotes in his back yard. Today they were howling when loud sirens went off.” He thought they lived in a “wooded area,” and believed they were a “large pack as it seemed there were many howling.”36

Howling disturbed several complainants. A Ryder Lake woman complained of coyotes “howling all night” and “disturbing her sleep.” An Abbotsford caller reported coyotes yodeling at 5:00 am. The same month a Chilliwack man complained about coyotes howling and said he’d like to shoot them. Other complainants were greeted by less friendly noises. A Chilliwack man complained of “raccoons and a coyote” trespassing on his property and “growling at him.”37

For some it was not just that coyotes occupied human space, but the quality of their occupation. Several complained of a lack of fear among coyotes, who did not run away when confronted. A woman in Rosedale complained that coyotes were “coming close to her house,” and were “not afraid of kids or dogs.” An Abbotsford man “said at least four coyotes came out of the bush in front of him and his dog. They weren’t afraid of him at all and he was afraid they might go after his or someone else’s dog.”38 Coyotes who stand their ground convey an unsettling sense of ownership; they challenge the expectation that wild animals should be transient in human spaces.
Several valley residents complained about coyotes denning on their property. In March 1999, a Surrey resident reported that a coyote had given birth to pups in his dog house and had attacked his dog. In April of the same year, another Surrey man complained of a coyote denning in a stump by his door. Many considered denning coyotes a nuisance and a danger to children. Wildlife officials were told that coyotes were denning at a townhouse complex in Port Coquitlam. The manager had received many complaints and “was concerned for children.” A Chilliwack woman complained that coyotes were “denning behind her property and...making a ruckus.” She was also “concerned about kids and pets.”

The safety of children and domestic animals worried many callers. Some of their fears were provoked by attacks on pets, which were common occurrences. Others were motivated by “the increase in [coyote] populations.” Many complainants were shaken by attacks on animals. A Sardis caller spotted a coyote with the “back end of a cat in [its] mouth,” and was “very, very upset.” A Port Moody man had a “small dog snatched from [his] yard in the evening.” He found a “portion of the carcass” the next morning. A Chilliwack man “put [his] dogs out and as he was standing there, his dogs about 40 feet away from him, a coyote ran up, grabbed his [Pomeranian] by the head...took him approximately 60 yards, then dropped him.” The man added that he was worried about neighbor children playing in the yard. An Abbotsford woman was “concerned about the coyotes that live in the brush -- cats are going missing...[and she] would like to know if coyotes pose a danger to children.” A Vedder Crossing resident called to report coyotes close to a daycare center.

Others were wary of coyotes “following” or “coming after” them. A Langley man reported “coyotes following children in a field.” In January 1995, a Surrey man claimed that coyotes chased him to his house, and that neighbors were feeding them. A conservation officer visited the man, and determined that the coyotes had simply followed him. He suggested the man chase the coyotes should they do so again. In March of that year, another Surrey man said that coyotes “had come after his daughter at the back of his place.” Upon speaking with the complainant, the conservation officer discovered that the daughter had been walking two dogs, who were most likely the object of the coyotes’ attention. In July, a third Surrey man
reported that three coyotes “came at him aggressively while he was unpacking his camper.” A municipal worker reported a coyote “came at him twice” while he was checking a flow meter on a creek.45

In April 1996, a Surrey woman claimed that coyotes were “being very aggressive,” and that “one chased [her] daughter and came up on her porch and growled at her.” A month later, the same woman reported that a coyote “chased someone on a bike.” By that time three of her neighbors had also called the Wildlife Branch. The man across the street claimed that coyotes had chased his car and were chasing children. His wife also made a general complaint. A woman down the street reported that a coyote “chased her room mate at about 10:00 p.m. It came at him three times.” A conservation officer set a live trap, but returned 10 days later to find it empty.46

In most cases, callers received advice only, usually given over the phone. In some cases, particularly when coyotes were denning on property, conservation officers visited complainants and gave information on how to prevent the coyotes from coming back. Just as they advised livestock producers to fence and clean up carcasses, they urged homeowners to keep garbage secured and pets inside at night. They told some to install fencing to protect dogs, and to stop feeding pets outside.47 Sometimes they also offered reassurance. An officer advised the Rosedale woman “not to worry. Coyotes are quite common in this area and usually do not cause a threat to people.” Other times they forthrightly explained the “difficulty of dealing with coyotes in urban areas.”48

Occasionally, conservation officers resorted to lethal means. When a Maple Ridge resident complained of a coyote “on their front steps and in the barn,” the ministry hired a local trapper, who shot an adult female coyote. Coyotes who made physical contact with people were also targetted. In June 1991, a boy in Maple Ridge was “confronted by a coyote in a bush, accompanied by other kids. He turned to run, fell down, [and the] coyote scratched him on the side of his face, with its front paw. [The boy] got up and ran without further incident.” The CO searched the area and two days later shot a coyote.49
Pups also warranted special attention. In October 1992 a Coquitlam woman found a young coyote, probably a newly dispersing juvenile, in her yard. The conservation officer relocated the pup 75 km away on Sumas Mountain. Two years later, in July, a younger pup was found at a campsite in Golden Ears Provincial Park. It was killed.  

Injured coyotes

A small number of complaint forms document injuries to coyotes. Some callers reported coyotes hit by cars. Others found coyotes carrying leg hold traps. Injured coyotes were classified as “nuisances” and were killed. Those found near residences, such as the hurt coyote found at the Alderwood Estate in White Rock, or the sick coyote found in a Port Coquitlam back yard, were also considered “human safety” problems. Many eluded capture or dodged bullets despite their injuries, or disappeared before conservation officers arrived.  

Other complaints, once investigated, were found to be inaccurate. A woman phoned the Ministry to report a coyote with a broken back in Hatzic. The complainant noticed the coyote “sitting on a hillside...howling.” She thought it was injured until it walked off 15 minutes later. Some complainants perceived injured or ill coyotes as threats and were anxious not so much for the coyote but for “pets and children.” On the other hand, a Sardis woman who reported a coyote in her area was “worried about people and dogs,” but didn’t want “anything to happen” to the coyote.  

Mistaken identity

Conservation officers investigated a number of cougar sightings and found no sign. They logged these complaints as suspected coyote sightings. Other complainants assumed that cougars had killed their dogs or livestock, but evidence showed that coyotes had done the job. Likewise, many coyotes sighted were actually dogs. In November 1991, a Matsqui man complained of a coyote under his house; however, it turned out to be a dog. A Chilliwack woman reported a “strange animal” in her yard and called back ten minutes later to say it was a “hungry wolf.” She claimed it was “definitely a wolf,” and was “very nervous”
about kids in the neighborhood. Ministry staff told her that it “definitely [was] not a wolf, but possibly a coyote or more likely a stray dog.” They reassured her that she had “nothing to worry about.”

Problem wildlife complaints tell us much about people’s discomfort with coyotes, and the spatial dimensions of that discomfort. They also tell us something about coyotes in the valley: their comfort in both residential and rural areas, their preference for sheep and for young animals, their increased use of livestock in springtime. Because complaint forms include the addresses of most complainants, they also allow us to map sites of human-coyote conflict, and, very partially, reconstruct coyote geography. Many reported attacks occurred within Atkinson’s calculations of coyote home ranges. Similarly, much of the information provided in the complaint forms reinforce his findings.

The complaint forms also reveal a glimpse of Coyote: Coyote the transgressor, who not only “jumps and digs under fences” but crosses less visible boundaries. Coyote the “courier in the no-man’s land between human and animal,” who brings random predation into the lives of farm animals, who carries sheep back into the role of prey. Coyote the mediator who bridges the “wild” and the “civil,” who lives in the spaces in-between the foundation and the soil, the chain-link fence and the trees, in the brushy, grassy, dirty fingers that infiltrate the managed spaces of suburban and urban life. Coyote the Transformer, who turns a dog house into a den, a plastic pipe into a bone, who turns himself into a connoisseur of poodles. Coyote the survivor, last seen running full bore with a trap on his leg. Coyote the wild card, who appears unexpectedly to twist the plot. Coyote the traveller, who goes everywhere and anywhere—farms and residential neighborhoods, barn yards and school yards, daycare centers and dog houses, and eventually, into the heart of the city.


2Stewart Bell, “Today’s Coyote: Closer, louder, bolder — and too smart to be trapped,” Vancouver Sun, November 21, 1992. Disney may have softened many people’s attitudes towards predators, but others seem more influenced by Stephen King. While animals cavorted to Stravinsky on Disney specials, they stalked and swarmed and took on monstrous proportions in a whole genre of animal invasion movies, popular in
the 1970’s and 1980’s. A common device in such movies was for creatures to appear in surprising places, to pop out of closets and peer in through the window when least expected.


PWOR November 5, 1997.

PWOR No. 95-279, April 4, 1995.

PWCF No. 26281, January 10, 1994.

PWCF No. 21083, April 16, 1993. See also PWCF No. 21086, April 15, 1993.

PWCF No. 21082, April 15, 1993.

PWOR November 5, 1997. This strategy was also used on golf courses. PWOR February 4, 1997.


PWCF No. 25999, April 6, 1993.


PWCF No. 25963, August 10, 1992.


While "nuisance" complaints formed the bulk of those received by the ministry, only a small percentage warranted the attention of conservation officers. For that reason, I draw examples from throughout the Fraser Valley.

PWOR No. 95-101, June 1, 1995; PWOR No. 94-075, June 17, 1994.

PWOR February 1, 1996.

PWOR No. 96-88, June 4, 1996; PWOR No. 94-100, July 8, 1994.


Nearly one-third (1/3) of the complaints I examined concerned pet loss.


PWOR No. 95-200, August 29, 1995; PWOR No. 94-210, September 22, 1994.
44 PWOR June 6, 1995.
46 PWOR April 24, 1996; PWOR May 8, 1996; PWOR May 9, 1996; PWOR May 13, 1996; PWOR May 21, 1996.
47 PWCF No. 26184, September 6, 1991.
51 PWOR June 6, 1996; PWCF No. 15156, April 29, 1994.
52 PWOR No. 96-22, January 21, 1996.
THE CITY
CHAPTER 7

COYOTES IN VANCOUVER

In 1931, Jessie Greer, then an old woman, recounted her childhood experiences near the village of Sun’ahk, at the mouth of False Creek. She was the daughter of Sam Greer, the first white man to settle near the village. Their homestead on Greer’s Beach, as whites would call it, had a kitchen garden, an orchard, a horse and some chickens, and a log milk house that held two cows. It was situated between a swamp to the southeast and a logging camp to the west. To the south lay forest, and the animals — bears, wolves, deer, and cougar — that sometimes ventured to shore. One night, sometime in the late 1880’s, Jessie heard a shot from the bedroom window. The next day, she found the body of a wolf in the garden.¹

Greer’s Beach is known today as Kitsilano Beach, named for Chief August Khahtsalanough of Sun’ahk. It is a city park. The swamp and forest have been replaced by mown bluegrass and stately willow trees. The skyscrapers of Vancouver look down upon it from across the narrow channel, and luxury houses line its southern perimeter. A trail that encircles False Creek passes along the beach, and through adjacent Vanier Park, and on sunny days it is crowded with people jogging, skating, and walking dogs on leads. There are no wolves here now.² Their former haunt is walled off by sea and cityscape. More importantly, wolves have no reason to come here. The elk and deer are gone. There is nothing for them anymore.

Vancouver is no longer wolf habitat, but it is a banquet for their smaller cousins. Coyotes have found their way into the city, where there is plenty of food for them, padding and scurrying about and overflowing from trash bins. They have become top predators among fellow generalists — the mice, rats, squirrels, skunks and raccoons who maintain an ecosystem under our sheds and in the bushes, within the green spaces and gray areas of urban life.

Although coyotes have lived on and moved through the fringes of metropolitan Vancouver since the 1890’s, they did not settle in the heart of the city until the 1980’s. Why they came to the city then — and not earlier — remains speculative, but is likely related to conditions in the Lower Fraser Valley, specifically the
rebound of coyote populations following the cessation of Compound 1080 poisoning programs, and the coinciding loss of desirable habitat -- fields, backyards, bushes -- to commercial, industrial, and high-density residential development. Coyotes came to Vancouver at a time when there were more coyotes and less space in the Lower Fraser Valley than ever before.

Fig. 1. Early coyote sightings near Vancouver.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1896</td>
<td>Richmond^3</td>
</tr>
<tr>
<td>1927</td>
<td>Delta^4</td>
</tr>
<tr>
<td>1928</td>
<td>Burnaby^5</td>
</tr>
<tr>
<td>1946</td>
<td>West Vancouver^6</td>
</tr>
<tr>
<td>1949</td>
<td>Lulu Island^7</td>
</tr>
<tr>
<td>early 1960's</td>
<td>West Vancouver^8</td>
</tr>
</tbody>
</table>

The first Vancouver sightings were in the University Endowment Lands, in 1982. Since then coyotes have found their way to Kitsilano, Stanley Park, and Spanish Banks; to Queen Elizabeth Park, Van Dusen Gardens, and the Southlands stables; to neighborhood parks, golf courses, vacant lots, backyards and eventually to some of the busiest thoroughfares in town. Today, coyotes-- about 200-300 of them -- are found throughout the city.\textsuperscript{9}

Coyotes utilize a number of habitats in Vancouver.\textsuperscript{10} Urban forests offer coyotes cover, denning sites and prey, as well as accessibility to adjacent golf courses, neighborhoods, and other open spaces. Coyotes often work the periphery of these areas, where prey is most abundant and cover is at hand. Coyotes use "linear forests," found along ravines, right-of-ways, and rail lines, as travel corridors and foraging runways.
Coyotes forage for rodents in “urban grasslands:” vacant lots, unmaintained fields and rights-of-way, overgrown yards, and horse pastures in the Southlands. Coyotes den behind thickets, blackberry brambles, and other brushy spots found in parks, ravines, vacant lots, and along rights-of-way. There they find an abundance of voles, mice, and other favorite prey -- as well as grass and berries. In the managed landscape -- city parks, golf courses, residential yards -- coyotes hunt for rodents, housecats, and small dogs, and find shelter in unexpected places. Some have denned in abandoned houses and under porches. Outside of denning season (February to June), coyotes sleep curled up under hedgerows or in other protected places. They find water in ditches and puddles.

Within all of these systems -- forest, thicket, grassland, and managed landscapes -- coyotes head the food chain. Large, fierce dogs can kill coyotes, especially working in tandem, but most urban dogs are kept inside or tethered when not under supervision. Coyote predators -- wolves and cougar -- are unable to live in the city. Urban coyotes will eat “whatever they can get,” but a recent Vancouver study found that small rodents and grass made up the bulk of urban coyotes’ diet. Cats and dogs together comprised about 15% of scat and stomach contents, and fruit about 10%. A small amount of garbage was also found.

Coyotes frequent green spaces but, like birds, rats, squirrels, and most urban wildlife, also utilize the “paved environment,” (streets, sidewalks, bridges, alleys and parking lots) and the built environment (abandoned houses, crawl spaces, and sheds). In 1995, coyotes denned and gave birth under the Sunny Hill Health Center for Children in Vancouver’s east side. Coyotes have dashed into stores, perhaps seeking cover, and are frequently seen along Main Street and other urban thoroughfares. Although coyotes use urban areas, UBC graduate student Kristine Webber found that the majority of coyotes were spotted in parks and were rarely seen in yards and alleys. Coyotes may frequent yards and alleys mostly at night, which is when they do most of their hunting. In my own informal survey, most coyote sightings in neighborhoods and along busy streets have been in evening hours.

Wildlife officials have recently noticed increased coyote activity during the day. In a recent article, Wildlife Control Officer Dennis Pemble commented on coyotes: “they are doing things we’ve never seen coyotes do
before...You’ll see them lying in the parks under the trees in broad daylight.” This may be an acknowledgment of safety or an opportunistic shift, perhaps predicated on the availability of handouts.¹⁸

Coyotes have adapted well to urban life, as they have to every new environment. Facing few constraints, (traffic being the most notable), they nonetheless enjoy an abundance of prey and adequate denning sites and cover. As smaller animals have demonstrated before them, the city is wildlife habitat -- not for many species, or even most, but it works for adaptive, generalist species -- like coyotes, pigeons, rats and us.

Yet traditionally, the city has been regarded as a refuge from wild animals, especially sizable predators, and the modern city is often considered the antithesis of nature. Animal geographer Jennifer Wolch writes that “the place-specific version of the nature/culture dualism is the city/country divide.”¹⁹ City limits form a boundary between culture and nature, so much so that many animals in the city are transformed into something else.

Characteristic urban animals -- rats, pigeons, crows, and the like -- are portrayed as dirty, deviant creatures, carriers of disease that have been degraded by their long association with humans, and that scarcely merit the term “wild.” These animals frequent sidewalks, plazas, alleys, the built and paved environment; they are small, and one can imagine them getting by on bits of food dropped by passerby, scavenged garbage, and the scanty natural produce of the city’s backyards and boulevards. Species that are larger and less common, and associated with “wild” habitats -- for instance, woodland creatures, such as raccoons and skunks-- become anomalies, novelties to some and pests to others. These animals seem marooned in the city, displaced from their natural habitats by tragic circumstance.

The latter, particularly raccoons, were Vancouver’s “problem animals” before coyotes appeared, and a source of increasing complaint in the mid-1970’s. The local Society for the Prevention of Cruelty to Animals (SPCA) and the Fish and Wildlife Branch received thousands of complaints annually, but were
unable to respond to most. Compounding the volume of requests was the public’s insistence that their “problems” be handled humanely. Relocation became the panacea among a public that was generally sympathetic to wild animals but felt that they belonged elsewhere. In a report on the control of urban wildlife, the SPCA explained that while “some members of the public consider that wild animals are intruding into the urban environment, the general considered opinion is that the animal should be contained and returned to some form of natural habitat where it may survive.”

Urban dwellers variably prioritized their twin demands of removal and protection. Some wanted the animals out, first and foremost, while others held the animals’ welfare at a premium. Many complaints concerned raccoons nesting in roofs, an activity that could cause considerable damage. However, many homeowners, “when informed that the cubs would die, if removed, [were] quite prepared to allow the animals to remain for a period of six to eight weeks, or until such time as the cubs are fit and well, and can then be moved to a natural habitat.”

Fish & Wildlife Branch officials were less patient with the public’s expectation that “offending animals...be transported ‘somewhere’ and released.” They adamantly opposed the relocation of animals on any large scale, arguing that it would simply “transport a problem from one community to another,” which would “already [have] its full complement of offending species.” They also feared that relocated animals would produce “harmful consequences to natural populations,” and spread disease. They saw limited options: either kill “nuisance” animals or release them into “starvation habitats.”

The Branch was correspondingly reluctant to address complaints about small animals in the city. They considered raccoon damage a “minor” problem, the control of which would be “an expensive exercise in futility.” They were mainly concerned with controlling the Big Four predators: wolves, cougars, bears, and coyotes, rather than urban nuisances. In 1977, with considerable skepticism, they funded the SPCA to take on the “never-ending, impossible task” of urban wildlife control.
A few years later, coyotes came to the city, and "impossible" took on new meaning. As their population grew and coyotes spread through the city, some began calling for coyote relocation. Foremost among them was City Councillor George Puil. "They're all over the place," he told the *Vancouver Sun*, "I think we're going to have to trap them and take them out to the wild. I don't think they have a place in an urban area." Relocation, however, was more easily urged than implemented.

When the first coyotes appeared in Stanley Park, in 1987, park officials worried that they would decimate populations of waterfowl and small mammals. They decided to live trap the coyotes and relocate them. Late in 1988, they constructed a big aluminum cage, and placed it in the police stables, where coyotes had been known to "hang around the horses and literally drool." On the bottom of the cage was a trap door, concealed by a pile of fresh meat. Park officials figured it would take three weeks to capture the animals. Mike MacIntosh, then park manager, recalls the outcome of their efforts: "Soon the coyotes arrived but they just sat outside the cages, rolled around and laughed at us." Three years later, an effort to capture coyotes at their West Vancouver dens and relocate them also failed -- absolutely.

At least one coyote has been relocated, but she was trapped by her own devices. In 1996 an adult female ran into the Esso station at 49th and Oak, and hid behind the chips display. Two hours later, with Dorito sales at a standstill, a conservation officer grabbed the coyote with a long handled device, and took her to the outskirts of New Westminster. The conservation officer's visit was unusual. They rarely visit the city, responding mainly to incidents considered a threat to human safety. They cannot poison coyotes, and shooting is unpopular and risky in urban areas. Leg hold traps pose a danger to cats and dogs, and live traps "simply will not work."

Rarely evicted and even more rarely shot, coyotes, it seems, are here to stay. Urban coyotes have challenged many residents' assumptions. Writer Alexandra Donson of Burnaby was "shocked" when her cat Spicey was nabbed. "I'm in a residential area, four blocks from Middlegate Mall," she told *The Province*. "I thought coyotes only lived out in the boonies." By claiming space in the city, coyotes have unsettled the comfortable correspondence between wild animals and "the wild."
Even those sympathetic to coyotes have struggled to reconcile their presence in the city. The *Vancouver Sun* interviewed Kerrisdale resident Lisa MacIntosh after she lost her miniature schnauzer to a coyote. "I understand that it’s cold outside," she said. "[The coyote] is starving. It’s out there trying to survive." The coyote’s predicament, she decided, made her dog’s death "a little easier to take." Although she accepted her loss, MacIntosh concluded, "It’s just weird that there’s a coyote wandering around preying on pet animals."  

*Province* Columnist Bob Stall devoted a column to the exploits of a Vancouver coyote who snatched a poodle at “the busy intersection of Oak and King Edward, smack in the middle of Vancouver,” a place he considered “farthest from any thoughts of being ravaged by wild animals.” He quoted the poodle’s owner, Allen Gaerber, who pursued the coyote through side streets and backyards: "It was amazing how comfortable the animal was in the city...He was brazen.”

Gaerber’s characterization of the coyote makes two important assumptions: First, that the coyote does not belong in urban areas, but also, that the coyote’s ease in the city constitutes a second offence, a flaunting of its trespass into human territory. It suggests that coyotes, if they do venture into town, should slink around unnoticed.

Coyotes are increasingly challenging these notions, as they challenge human prerogatives in urban spaces. For some residents, this means displacement. An east Vancouver woman was reportedly “infuriated” that authorities did not remove the coyote from the “park where she normally takes her dog for a walk.” Because of the coyote, “people aren’t even using this park anymore,” she said.

In encounters with humans, coyotes claim space in a way some find unsettling. As in the Fraser Valley, Vancouver residents complained that coyotes showed no fear of them. A Shaughnessy man recalled a coyote encounter in a letter to the *Vancouver Courier.* "When we saw it trying to catch a cat in somebody’s yard, I stopped the car and jumped out, and the coyote ran to a lawn a couple of houses away and waited."
The front light of the house was on, and the street lights were shining on the boulevard. A car was unloading people in the driveway of the house across the street, and my car was stopped with headlights on right beside the coyote. Neither lights or people seemed to bother the coyote at all. It certainly was not trying to hide in the bushes or get out of sight.\textsuperscript{33}

West Vancouver SPCA vice-president Marsha Nixon failed to frighten the coyote who attacked her English setter. "[It] wasn't too perturbed at me jumping up and down and yelling," she said. It just looked at me and then sauntered off." The coyotes' composure even unnerved Councillor Puil. "One time I saw a posse of five of them --- they just sat there and they wouldn't move."\textsuperscript{34}

Residents also complained of coyotes following them. In an October 1992 article in the \textit{Vancouver Courier}, a westside Vancouver woman recalled rescuing her dog from a coyote: "What worried me is that once we took the dog home, the coyote followed us to within 20 feet of the door...This [coyote] must be awfully desperate and hungry to come that close."\textsuperscript{35} More recently, a Shaughnessy woman was confronted by a coyote as she jogged by with her poodle. She shouted at the animal, but he followed her anyway. The coyote ducked into the bushes when a car went past, and the woman ran off. When she turned and saw the coyote again, she ran into a church. Outside, the coyote waited at the front gate. The woman, too afraid to come out, was "trapped" in the building until a parishioner grabbed a broom handle and escorted her to her car.\textsuperscript{36}

Coyotes have ventured onto front porches in pursuit of prey. In the Dunbar neighborhood, two coyotes teamed up to secure a terrier from the front steps of its house, while the horrified owner watched from the doorway.\textsuperscript{37} Coyotes have also approached small dogs on leashes. Through their long history with wolves and larger predators, coyotes have developed the spatial awareness of an underdog, the art of knowing, testing, and transgressing the limits of a dominant species. While coyotes do not seek confrontation, they sometimes find it when investigating its threshold.
In an environment with few dangers, such as the city, coyotes challenge the assumptions of those who expect them to cower in the bushes or part like the Red Sea before them. More than anything coyotes display an agency that suggests they are here on purpose. Coyotes are not displaced or dependent, they have not wandered in by mistake, or in desperation after a hard winter. They are not transient phenomena but permanent residents of the city.

As coyotes claim space, they also withstand redefinition. Less charismatic animals may be absorbed into the banality of the city, but coyotes maintain their maverick image. In the press they remain “Wile E. Coyotes” who inspire “howls” of protest and countless other puns. Some accounts barely conceal their sympathies: “Look out Wiley Coyote, George Puil is after you!” begins a *Vancouver Sun* article. “Wily coyotes get the last laugh,” reads a headline.38

Municipal wildlife officials are among their biggest fans. Park Commissioner Roslyn Cassells calls them “free spirits.” Mike MacIntosh, now supervisor of Queen Elizabeth Park, “has nothing but admiration for the coyote.” Stanley Park Ecology Society president Kristine Lampa sums up their popular persona: “They’re smart and bold and comical and they’ll get your goat every time.”39 MacIntosh agrees: “They’re quite funny. I rounded the corner this summer and there was this coyote sitting and watching a wedding in the rose garden.”40

Coyotes stand out. Sparrows flit and mice scurry unnoticed in the city, but it’s hard to ignore a coyote loping down Main Street, a tabby in its mouth. It’s an odd juxtaposition -- the wild upon the civil, the laws of nature upon the rules of society -- that shakes up our urban understandings. The city is transformed: pets become prey, abandoned houses dens, and the city itself an ecosystem.

Many in Vancouver accept this overlapping jurisdiction. They give coyotes a kind of ecological immunity, forgiving them their appetite for housecats, and adapting to their presence. Neighbours warn each other to bring in the pets when a coyote is spotted, as if it were a thunderstorm. Marpole resident Diana King who lost her elderly Sheltie to two coyotes, seemed to hold little resentment toward the species. “They seem to
be assimilating nicely into our lives, and that's fine with me. But people should know that they shouldn't be leaving their animals out at night."\(^{41}\) Mary Auerbach, a University Endowment Lands resident, also accepted her losses. "I don't want to get people all upset about coyotes," she told a *Vancouver Courier* reporter, "I just want to let them know that the danger exists and you should always bring your cat in. I just goofed and left my cat out one night."\(^{42}\)

Still, anger at pet losses is the primary complaint lodged against coyotes, and in recent months, concerned pet owners have organized for "something" to be done.\(^{43}\) Nonetheless, like the Fraser Valley, Vancouver is now recognized as coyote territory. Pet owners must choose between confining their animals and exposing them to predation. Municipal officials reiterate graduate student Knut Atkinson's conclusions in an urban context: to prevent predation, cats and dogs must be either watched or removed from the spaces that they share with coyotes.

Beyond confinement of pets, wildlife officials recommend a second, more fundamental segregation. While considering it impractical, and in many cases undesirable, to relocate coyotes, or other urban animals, to "natural environments," they locate these animals within their own "wild" natures. Here the "wild" is not a place but a complex of sensibilities -- a set of practices and understandings, a cultural space, in a sense, that is vulnerable to human disturbance. If respected, this space serves as a kind of portable wildlife refuge that safeguards animals from human influence, even as they share our sidewalks and city parks. Friendly interaction, however, particularly feeding, is said to erode an animal's wildness, and draw it into an aggressive dependence on humans. Vancouver Parks & Recreation brochures urge people to "respect the wildness" of urban animals, to allow them their own parallel realm, where nature can operate on its own terms.

This sequestration of wild animals is motivated by both practical and ethical considerations. Given our history with other species and their habitats, the notion of an inviolate realm, open to all other species, seems just. In another sense, it is a recognition of diversity, of plurality. It contends that different subjectivities can co-exist, albeit at a distance. It reminds us that wild animals are neither desperate nor
dependent, that they are not our playthings or pets. It asserts their autonomy and seeks to preserve their way of being in the face of a dominant, oppressive majority. Conversely, this distancing seeks to protect humans from wildlife, to create a complementary space where humans can be left alone -- free from aggressive "panhandling," free from threat of injury or disease, free to watch and wonder about coyotes, to hear their song at night, but safe from their formidable bites.

This approach resembles Ian McTaggart Cowan’s arguments of the 1940’s, and is perhaps a direct descendant of them. Cowan conceived of wilderness areas as alternative spaces, governed by the balance of nature, and, in most cases, best left alone. In more recent years, the “laws of nature” have been attached to the animals themselves, and have been rendered more mobile, accompanying coyotes through farm fields, neighborhoods, and now the city. Since the 1960’s, coyote tolerance has been encouraged by the idea that the animals -- wherever they go -- exist in another context, and under different rules. In many ways, this segregation defines “problem wildlife” control. In the city, a "normal" coyote goes about its own business, in its own parallel wild animal world. A dangerous coyote approaches humans, crosses the line, and takes an intersecting path.

Beyond human contact, the boundaries of this “wildness” are disputed. Cats and dogs are borderline species, and their place in relationship to coyotes is controversial. Some place pets with their fellow animals, within the game of predator-prey. Others feel predation on pets is an intrusion into human territory. The confinement of pets in houses, to protect them from coyotes, physically manifests their presumed separation from “the wild.”

The shifting place of pets underscores the instability of this model, which is problematic in a number of ways. First, I doubt the existence of a singular “wild” subjectivity. Each species perceives its world differently, as do individuals, and each has varying relationships with humans. The notion of “wildlife” in itself is troublesome, as it lumps all non-domestic species together; it constructs them as a class, an integrated whole from which humans, and our domestic animals, are excluded. “Wildness” is not a state of being but an ascribed quality imagined in relationship to humanity. It is a negative construct against which
we define our society. Locating urban animals within a state of “wildness” seems a way of maintaining the culture/nature divide, where it has certainly broken down. It proposes an essential incompatibility between humans and animals not under our control.

In this sense, classifying animals as in some other realm increases our alienation from them, and precludes any meaningful social exchange. They remain spectacles, like creatures on the Discovery Channel. We can see them and hear them but we are advised against interaction. Instead of exploring the subtleties -- or even the more obvious components -- of canine communication, as we do with our dogs, we are advised to keep away from coyotes, and to drive them away.

Betsy Terpsma, ministry spokeswoman, warns: “These coyotes are losing their natural fear of people, so when people see a coyote they need to take bold action. They need to make the coyotes afraid of people -- throw things at them, yell at them, scare them away. Keep them wild.” This example raises the last, perhaps obvious point: “natural fear” withstanding, the boundary between “wildness” and urban humanity is one that animals constantly transgress.

More than a century after Jessie Greer woke to gunfire, another shot was fired. On that same stretch of ground, another wild dog, much smaller than the wolf, lay dead. His stomach was filled with chicken, cooked and seasoned, and the remains of a hamburger. Since early April he had chased dogs and followed people, eaten neighborhood cats, and run up to kids with hot dogs. Wildlife officials had received “dozens and dozens” of complaints about him. A week earlier he had been playing like a puppy with a girl in Vanier Park, and he had been recently seen cavorting with a domestic dog and its owner.

The coyote, the girl, the dog owner, the dogs, were crossing boundaries so often imagined and upheld that we forget how quickly they dissolve. Yet in doing so, they had violated the terms of co-existence. The coyote had crossed too often, and too aggressively, into the human realm.
Then he noticed the 13-year-old rolling down the hill at Vanier Park. He ran up behind her and nipped her, not hard, then backed up to see her response. The girl was shocked but not frightened or hurt. She and her father left, stopped by the hospital for a rabies test, and reported the incident to the ministry. A few days later, with the stack of complaints growing, Dennis Pemble found the coyote in a nearby woods and shot him. Afterwards, Pemble told the Vancouver Sun, “It is unfortunate that the coyote has to pay the price for our careless feeding... We hate to destroy wildlife, but we have to protect the public.”

Feeding urban coyotes is an ignorant act, not because it violates their “wildness,” but because it ignores the consequences for both coyotes and people. It fails to recognize that coyotes live in our world, in a society that kills aggressive animals. Perhaps more importantly, it ignores that we live in theirs. Coyotes can be dangerous, not because they are “wild” and we are not, but because we are both subject to the dynamics of predation and other ecological processes that appear to belong elsewhere. Feeding coyotes does encourage them to approach people more frequently and aggressively. When they do so, many people are ill-prepared, and fear for their safety. In Webber’s survey, most people approved of killing coyotes “under certain circumstances,” foremost among them being “human safety.” Feeding and playing with coyotes can encourage them to cross that last boundary, into the place where coyotes again are marked for dead: the personal space of human beings, the terrain of the human body.

Yet shooting coyotes will protect our personal space no better than it has protected sheep pastures for the past 150 years. One month after the Vanier Park coyote was shot, an east Vancouver coyote bit a four year old girl, this time drawing blood. This coyote ran from the scene and has not been caught. We need to increase our sophistication in dealing with coyotes. The more that we familiarize ourselves with coyotes, the more sensible our responses will become. Instead of standing in our skins and calling them inviolate, we need to understand specific vulnerabilities and adapt strategies to minimize them. We need to better acquaint ourselves with coyotes, so that we can interact appropriately, and knowledgeably, and develop relationships with them that preclude dependency; so that we can respect coyotes as individuals, as neighbors, and as creatures with a mean (and sometimes not so mean) bite.
This may sound idealistic, but consider the dissimilarities between the shooting of Greer’s wolf, 120 years ago, and the killing of the Vanier Park coyote. The wolf was shot immediately, by a man perhaps concerned for his livestock, or perhaps acting from a common hatred of wolves. The coyote was shot after several weeks and numerous complaints, by a government employee. The killing created a public controversy, and was blamed by many on humans who had fed the coyote. The man who fired the shot, and the girl who was nipped, deeply regretted the coyote’s death.

Coyotes are not one-dimensional “predators” whose only objective is food. Coyotes play. Coyotes can be curious. Coyotes have complex motivations. The Vanier Park coyote showed that. The east Vancouver coyote, like many of his predecessors throughout the province, showed that the outcome of human-coyote conflict is not always ours to decide.

2The last wolf sightings in Vancouver occurred in the 1910’s. MacDonald, Vancouver, p. 34-5.
11Webber, Urban Coyotes, p. 98.
12Wolves especially. They run in packs, live on large ungulates and have larger home ranges. Cougars could survive on housecats and raccoons, for a while, at least, but they are not tolerated in human communities.
13Mike MacIntosh, personal communication, March 8, 1999.
14Webber, Urban Coyotes, p. 51.
16Webber, Urban Coyotes, Webber (now Kristine Lampa) is now director of the Stanley Park Ecology Society.
17Webber, Urban Coyotes, p. 97
21ibid, p. 4
23Many of these species were the same "vermin" that their predecessors had so relentlessly pursued.
30Lindsay Kines, "Cold snap causes starving coyote to prey on Kerrisdale pets, biologist warns," Vancouver Sun, Jan. 11, 1993.
31This attitude persists. Nearly half the respondents in Webber's 1995 survey chose "relocation" as the best way to deal with "problem wildlife." Webber, Urban Coyotes, p. 29.
32Pamela Fayerman, "Her howl against coyote led to a dead-end trail," Vancouver Sun, April 7, 1988, p. A3.
36Chris Miller, "Woman left to fend off coyote after police refuse to respond," Vancouver Courir, March 12, 2000.
38"Wile E. Coyotes prowl park," The Province, July 12, 1992; Pynn, "Wily coyotes are here to stay;" Bell, "Puil declares war on the urban coyote;" Eberts, "Wily coyotes get the last laugh."
39Pynn, "Wily coyotes are here to stay."
40ibid.
CONCLUSION

Over the past 100 years, coyotes have made their way down river, through the bounty system and past poison stations, beyond the hostility of stock raisers and the efforts of the provincial government. They have endured persecution that few species could bear, yet have survived to claim residence in the city of Vancouver. Throughout North America, coyotes have walked backward through the frontier myth of species extinction, and are the only predator to have increased in number and range. Coyotes have been killed over and over again, but live.

Yet, as if scavenging the remains of tattered ecosystems, coyotes came downstream in the wake of ecological destruction. In the Fraser Valley, their arrival accompanied the felling of coastal temperate rainforest, and the loss of many species that lived within it. It was at the expense of wolves that coyotes were able to make their way downstream.

Coyotes, according to nature writer David Quammen, are consummate “weeds”: “aggressive, versatile, prolific, and ready to travel.” They will grow anywhere, on the most degraded landscapes, in the wake of less hardy species and more diverse ecosystems. They inhabit his “ugly vision” of the future “in which Earth’s landscape is threadbare, leached of diversity, heavy with humans, and ‘enriched’ in weedy species...Wildlife will consist of the pigeons and the coyotes and the white-tail [deer], the black rats...and brown rats... the house sparrows and the house geckos and the houseflies and the barn cats and the skinny brown feral dogs and a short list of additional species that play by our rules.”

It is this last point with which I take exception. Had coyotes played by our rules, they would have been exterminated one hundred years ago. Instead they have shown us the limits of our control. They have insinuated themselves into our homes -- our ranches, our hobby farms, our backyards, and our cities -- and claimed them as their own. Coyotes tell us that humans will not escape “nature,” but just endure it in a harder form. They remind us that we play by its rules, and that they are not predictable.
Is the influx of coyotes something to celebrate, or cause for alarm? As in any good Coyote story, the answer is both.

WORKS CITED

Books


Theses


Webber, Kristine. Urban Coyotes in the Lower Mainland, British Columbia: Public Perceptions and Education,

Unpublished manuscripts


Shepherd, George Herbert. “Wolves of British Columbia,” unpublished manuscript submitted to the B.C. Centennial Anthology Board.

Chapters


**Journal Articles**


Murie, Olaus J. "Notes on Coyote Food Habits in Montana and British Columbia," *Journal of Mammalogy* 26(1), 1936.


**Newspapers**

*Abbotsford, Sumas, Matsqui News*, 1978-9

*Chilliwack Progress*, 1916

*Delta Optimist*, 1979

The New York Times, 1999


The Vancouver Courier, 1991-2000


Government Documents


British Columbia. Game Department. Game Warden’s Report. 1908-1917.

British Columbia. Game Department. Report of the Provincial Game Commissioner, 1918-1934.


Transcripts