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THE EFFICACY OF THE WORLD HERITAGE CONVENTION AS A  
PLANNING TOOL FOR THE RIGOROUS PROTECTION OF NATURAL SITES

By

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ABSTRACT

People interested in the protection of some areas of land from consumptive use and/or resource extraction have been concerned in recent years because few new areas have been set aside under the protection methods available. As well, even land which has been designated for protection is being threatened with reductions in the strength of that protection so as to permit extensive resource use. The need arose for an administrative method to ensure the long-term, rigorous protection of land. The purpose of the thesis is to evaluate the efficacy of one method which professes to offer rigorous protection, that is, the World Heritage Convention, in relation to the Canadian Rockies region.

The World Heritage Convention is a multilateral, international convention which provides international recognition of universally significant natural and cultural heritage, and has been administered under Unesco's auspices since its signing in 1972. Each nation party to the Convention retains sovereignty over World Heritage Sites on their territory, but they are obliged to ensure adequate long-term protection.

The Rockies region is currently subject to numerous resource threats, including issues arising from the Four Mountain Parks planning process, the impact of coal, oil and

gas development, and a change in the policy for resource management of the Eastern Slopes.

The Convention is evaluated against ten criteria which were derived from an examination of the rationales for land protection. Traditional criteria for the evaluation of decision making processes are rejected in favour of independently derived criteria because of an emphasis on the outcomes of resource management decision making, rather than on the processes. The criteria are broadly categorized as including the types of permitted activities, the inclusiveness of the purpose(s) for which the site is designated, the strength of protection, and its implementability.

The use of the World Heritage Convention in the Gordon-Upon-Franklin River dam development threat by Tasmania, Australia is characterized as an example of how the World Heritage Convention may be used to focus domestic and international attention and opprobrium for threatened areas. On the basis of this study several conclusions can be drawn regarding the World Heritage Convention's efficacy in enhancing rigorous protection of the Canadian Rockies. The Convention does not offer the level of rigorous protection which is argued for in the thesis because of the permission of some resource extraction and motorized recreation and the lack of a formal monitoring procedure. Nevertheless, it is



concluded that it offers more advantages than disadvantages. The advantages include the conferral of prestige and international recognition on the nation and site nominated, a reduced susceptibility to political/financial expediency, the presence of informal monitoring of site quality by the IUCN, and the ultimate leverage (and the resulting political ramifications) of delisting for ensuring the ongoing, durable, protection of definable sites. Additional positive features of participation at the international level are also important for developed countries like Canada: principally this refers to suasion and leverage in the third world for protection of globally significant biomes (e.g., tropical rainforests).

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TABLE I: LIST OF ABBREVIATIONS USED

<u>Abbreviation</u>	<u>Full Title</u>
AR&Parks	Alberta Recreation and Parks
AWA	Alberta Wilderness Association
CNPPA	Commission on National Parks and Protected Areas of the IUCN
CT	Conservation Terrestrial (section of IBP)
CWS	Canadian Wildlife Service
E&NR	Alberta Ministry of Energy and Natural Resources
FLUZ	Forest Land Use Zone (Alberta)
HCF	Habitat Conservation Fund (B.C.)
IBP	International Biological Programme
ICCROM	International Centre for the Study of the Preservation and the Restoration of Cultural Property in Rome
ICOMOS	International Council on Monuments and Sites
ICSU	International Council for Scientific Unions
IUCN	International Union for Conservation of Nature and Natural Resources
MAB	Man and the Biosphere (Programme)
MLP&H	Ministry of Lands, Parks and Housing (B.C.)
P&Y Region	Pacific and Yukon Region (Environment Canada)
Unesco	United Nations Educational, Scientific and Cultural Organization
U.S.	United States (of America)

## CHAPTER 1: IS INTERNATIONAL ENVIRONMENTAL ACTION WORTH THE EFFORT FOR DEVELOPED NATIONS?

### 1.0 The General Problem and Its History

A wide range of legislation and programs have been used by various nations to protect land. In most cases each nation has independently focussed on areas within their own boundaries. Only a few joint land protection efforts (e.g., Waterton-Glacier National Parks at the Canada/U.S.A. boundary) had been initiated until the late 1960s and early 1970s when the escalation of environmental concerns was spawning numerous international programs and conventions. International land protection measures established during the burgeoning of international programs do not challenge a nation's sovereignty, and thus have acted as incentives for the protection of many sites containing globally valuable natural resources. The thesis concerns one of these programs, the World Heritage Convention which was established in 1972. It examines the efficacy of the World Heritage Convention as a method of ensuring the rigorous protection of natural lands.

The present thesis focusses on the protection of land, so a very brief examination of the history of land protection and land use management changes over the years is necessary to set the current land protection efforts in their



historical context. Following the development of the history of land protection and management techniques, the basic philosophy from which the present thesis is based is explicated. The rationales for the rigorous protection of land are fully developed in Chapter 2.

At this point, a brief overview is presented which highlights the history of land protection in Europe and in North America. It will be argued that North American society has developed over time an increasing understanding of the need for rigorous protection of some natural sites. The reader should bear in mind that the thesis is not calling for the rigorous protection of all protected sites, nor does it call for the reservation of all currently undeveloped land to protection. The focus of the thesis is on ensuring the rigorous protection of universally significant sites.

Some of the earliest protected areas were the private hunting or recreational areas of the ruling classes. As Hart notes,

Only a small group, usually in the upper class, often sport hunters or intelligentsia, turned its attention to the problems of the natural attributes of the landscape. Through dedicated, diligent and sometimes autocratic effort, they were able to reserve, under one guise or another, sizeable areas of land for conservation purposes (Hart, 1966: 16-17).

As the land was developed and had lost a good deal of its natural character in Europe by the end of the 19th century, organizations like the Royal Society for the Prevention of Cruelty to Animals and the Royal Society for the Protection of Birds were developed and took an interest in the protection of "desirable" (i.e., edible, pretty or rare) wildlife, mostly birds, species (Sheail, 1976). North America, having a larger undeveloped land mass, felt the development pressure much later. However, John Muir, the founder of the Sierra Club, began to lobby in the late 1800s and early 1900s for the protection of areas of the Sierra Mountains in California from the extensive resource development he anticipated would destroy their considerable beauty (Tucker, 1982). Many people thought Muir's concerns were unfounded and maintained that human needs for natural resources superceded the esoteric values of wilderness which Muir emphasized. National forests (in the U.S.A.) and national parks were set aside beginning in the 1880s, but they were protected with the expectation of being usable in the future when required (Nash, 1973).

The first national park in Canada was established in 1885 with the reservation of 10 acres. That site was later expanded and became Banff National Park. Initially, Banff was protected so as to keep private interests from developing the hot springs: the government planned to develop the hot springs as a commercially viable resort (Marty, 1985). It

was only much later, in the post World War II period, that Banff was protected for its natural features.

In the early 1900s, public opinion towards wilderness areas tended to be broadly utilitarian: human uses took precedence. As an example, the Hetch Hetchy dam case in northern California was decided in favour of dam development in this period although the values of wilderness were strongly argued for by Muir and others (Nash, 1973).

The period between the two World Wars saw the development of the multiple use land management concept in Europe. The essence of multiple use was that forestry, mining, recreation, water management, and other resource uses could all be accommodated to their highest and best use in a given area with adequate advance planning. By the end of the war, the concept was widely accepted in European forestry circles and was rapidly gaining popularity in North America with such champions as Gifford Pinchot, former head of the U.S. Forest Service (Nash, 1973). The 1960 U.S. Multiple Use - Sustained Yield Act (1960, 74 Stat. 215) defined the multiple use concept as,

(T)he management of all the various renewable surface resources of the national forests so that they are utilized in the combination that will best meet the needs of the American people making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; all of the resources; and harmonious and coordinated management of the various resources, of the productivity of the land, with consideration

being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output (Hall, 1963: 276-277).

Soon after the enactment of the multiple use legislation, there was serious criticism of its basic assumptions (Behan, 1967) and of its validity as a conflict resolution method (Hall, 1963). The concept, however, has remained and is firmly entrenched in forestry agencies such as the B.C. Ministry of Forests, to the concern of those interested in the protection of some sites of land.

The field of planning was first aware of protected areas through the movement from an early emphasis on transportation, water supply, urban form and other infrastructure issues to planning for urban recreational parks in the early 20th century. A key landscape architect of the early part of the century was Frederick Law Olmsted, the designer of New York's Central Park. The primary emphasis with Central Park as with the other early urban parks was their relationship to the rest of the built city form (Hart, 1966). Little value was given to undeveloped land, partly due to the fact that there was a relatively large stock of available wilderness, and wilderness was still approached with a pioneer attitude, that is, that it should be developed for human use. Subsequently, planning for the housing and occupational needs of returning soldiers and dealing with problems associated with the resulting baby boom

consumed the energy of planners during the post World War II period.

By the 1960s, a mandate in planning for concerns beyond the urban areas was developing. The space flights were engendering new "whole earth" concepts, and the effects of industrial pollution and expanding suburban development on the natural environment were beginning to be recognized. So many of these environmental issues crossed national boundaries that international deliberations were rapidly growing (Table II lists some of the international, multilateral environmental treaties to which Canada is party). The attitude of the general public was beginning to swing towards a sensitivity to wild areas. At the same time, international efforts were also being made on other issues with strong moral overtones (e.g., the Helsinki accord, etc.).

Within North America, Aldo Leopold's call for a "land ethic" was a rallying call for a growing preservationist lobby. As Leopold wrote,

All ethics so far evolved rest upon a single premise: that the individual is a member of a community of interdependent parts. His instincts prompt him to compete for his place in that community, but his ethics prompt him also to cooperate (perhaps in order that there may be a place to compete for).

The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land.

TABLE II: A LIST OF SOME INTERNATIONAL, MULTILATERAL  
ENVIRONMENTAL TREATIES TO WHICH CANADA IS PARTY

Agreement on an International Energy Programme concluded 18 November, 1974 in Paris. Canada became party 17 December, 1975

Agreement on the Conservation of Polar Bears concluded 15 November, 1973 in Oslo. Canada became party 16 Dec. 1974

Convention for the Conservation of Salmon in the North Atlantic Area concluded 2 March, 1982 in Reykjavik. Canada was a signatory, 18 March, 1982.

Convention for the International Council for the Exploration of the Sea concluded 12 September, 1964 in Copenhagen. Canada became party 22 July, 1968.

Convention for the Protection of the World Cultural and Natural Heritage concluded 16 November, 1972 in Paris. Canada became party 23 July, 1976.

Convention on Fishing and Conservation of the Living Resources of the High Seas concluded 29 April, 1958 in Geneva. Canada was a signatory 29 April, 1958.

Convention on Future Multilateral Co-operation in the North-West Atlantic Fisheries concluded 24 October, 1978 in Ottawa. Canada was signatory 30 November, 1978.

Convention on Long-Range Transboundary Air Pollution concluded 13 November, 1979 in Geneva. Canada became party 15 December, 1981.

Convention on the Conduct of Fishing Operations in the North Atlantic concluded 1 June, 1967 in London. Canada was a signatory 28 November, 1967.

Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter concluded 29 December, 1972 in London. Canada became party 13 November, 1975.

Convention on the Prohibition of Military or any Other Hostile Use of Environmental Modification Techniques concluded 10 December, 1976 in New York. Canada became party 11 June, 1981.

Convention on Wetlands of International Importance Especially Waterfowl Habitat and 1982 Protocol concluded 2 February, 1971 in Ramsar. Canada became party 15 January, 1981.

Convention Placing the International Poplar Commission Within the Framework of FAO concluded 19 November, 1959 in Rome. Canada became party 28 November, 1962.

Interim Convention on Conservation of North Pacific Fur Seals concluded in 1957, amended and extended 1963, 1969, 1976 and 1980. Canada became party 16 September, 1957.

International Convention for the Conservation of Atlantic Tunas concluded 14 May, 1966 in Rio de Janeiro. Canada became party 20 August, 1968.

International Convention for the High Seas Fisheries of the North Pacific Ocean concluded 9 May, 1952 in Tokyo. Canada became party 12 June, 1953.

International Convention for the Prevention of Pollution of the Sea by Oil concluded 12 May, 1954 in London. Canada became party 19 December, 1956.

International Convention for the Protection of Plants and Plant Products concluded 6 December, 1951 in Rome. Canada became party 10 July, 1953.

International Convention on International Trade in Endangered Species of Wild Fauna and Flora concluded 3 March, 1973 in Washington. Canada became party 10 April, 1975.

U.N. Convention on the Law of the Sea concluded 10 December, 1982 in Montego Bay. Canada was a signatory on 10 December, 1982.

(Adapted from: Bowman and Harris, 1984)

... A land ethic of course cannot prevent the alteration, management, and use of these 'resources', but it does affirm their right to continued existence, and, at least in spots, their continued existence in a natural state.

In short, a land ethic changes the role of Homo sapiens from conqueror of the land-community to plain member and citizen of it. It implies respect for his fellow-members, and also respect for the community as such (Leopold, 1949: 203-204).

Combined with an increasing understanding of the complexity displayed by ecological systems, and the worldwide significance of those systems, Leopold's work (and that of others like Henry David Thoreau, John Muir, and Rachel Carson to name a few) along with the work of other ecologists like Paul Ehrlich provided the foundation of the eco-philosophy of the late 1960s which was so vehemently argued by members of the counterculture (Nash, 1973). This was combined with the growing trend by urbanites towards outdoor recreational activities like camping, backpacking, canoe tripping and cycle tripping as an escape from the overcrowding of urban areas. Many ordinary people became predisposed to the preservationist arguments. As an example of the change in public attitudes, threats of dam development on the Grand Canyon were fought using similar arguments to those used in the Hetch Hetchy dam case, but the results were entirely opposite, dam development was stopped (Nash, 1973).

More recent writings have described the philosophical underpinning of new approaches to the natural environment as "deep ecology" (Devall and Sessions, 1985). In essence, deep



ecology responds to Leopold's call for a land ethic. The deep ecology approach provides the philosophical foundation for the present thesis. Deep ecology may be described as going

beyond the so-called factual scientific level to the level of self and Earth wisdom.

Deep ecology goes beyond a limited piecemeal shallow approach to environmental problems and attempts to articulate a comprehensive religious and philosophical worldview. The foundations of deep ecology are the basic intuitions and experiencing of ourselves and Nature which comprises ecological consciousness. Certain outlooks on politics and public policy flow naturally from this consciousness.

... Ecological consciousness and deep ecology are in sharp contrast with the dominant world view of technocratic-industrial societies which regards humans as isolated and fundamentally separate from the rest of Nature, as superior to, and in charge of, the rest of creation. But the view of humans as separate and superior to the rest of Nature is only part of larger cultural patterns. For thousands of years, Western culture has become increasingly obsessed with the idea of dominance: with dominance of humans over nonhuman Nature, masculine over the feminine, wealthy and powerful over the poor, with the dominance of the West over non-Western cultures. Deep ecological consciousness allows us to see through these erroneous and dangerous illusions (Devall and Sessions, 1985: 65- 66).

The author's understanding of deep ecology is tempered by a recognition that changes in human life-styles implied by the deep ecology approach will take time, and that all aspects of life are tied into various parts of many systems. The understanding of systems was expounded by Beer (1973) and Schumacher (1973), to name a few authors, but the deep ecology approach provides the most compatible philosophical basis for the present work.

The environmental movement has identified numerous crucial supranational issues (e.g., air and water pollution, etc.) that depend on the willingness of sovereign nations to relinquish some of their freedom to act as they wish. Of interest to the present author are efforts to ensure the rigorous protection of land to ensure a viable natural environment for future generations. International efforts in land protection depend primarily on the seriousness of the participating nation with regard to their accepted international obligations. In this sense, opprobrium for lack of conformance with the international agreement centres around moral suasion imposed by other participating nations. However, Baumol and Oates (1979) who looked at programs for encouraging recycling and reduced resource consumption, indicated that moral suasion was only effective in emergencies, where surveillance is required, or when there is insufficient funding to achieve the objective otherwise. Effective participation may require tangible incentives or be "non-voluntary". While opprobrium has always had some influence on governments' actions, the level of influence is difficult to measure. Because the current flood of international environmental agreements depend on moral suasion to ensure their efficacy, it is thus valuable to ask whether a protection mechanism based on moral suasion is worthwhile.

The purpose of the present thesis is to evaluate the World Heritage Convention's efficacy as a resource planning tool in accomplishing the rigorous protection of natural sites in Canada. To provide a context in which to examine the convention's efficacy, the Canadian Rocky Mountain Parks World Heritage Site was selected. It was chosen from the list of Canadian World Heritage Sites (shown in Figure 2 in Chapter 5) for several reasons:

1. it was recently established as a World Heritage Site so the history of its designation was within the relatively recent memory of the key participants,
2. it is located relatively close to Vancouver, British Columbia, the author's home base,
3. recent resource use conflicts have been present in the Rockies region, containing the World Heritage Site, and the importance of the World Heritage Convention might have relevance to those conflicts, and,
4. the author is personally aware of the area and has a sense of concern about its future.

Why study the World Heritage Convention? During a contract position with the Canadian Wildlife Service (CWS), the author became aware of international land protection methods and the fact that they were given relatively low priority within the CWS as land protection mechanisms. The World Heritage Convention appeared to offer a potentially high level of protection. Questions about the wisdom of assigning such a low priority to

what might be potentially valuable land protection mechanisms arose. A growing sense of concern about the ability of multiple use approaches to land use providing any protection to critical areas, and a sense that multiple use was effective only for resource extraction agencies (i.e., it left recreationists and those concerned with noncommercial wildlife feeling unsatisfied) also led to the conviction that at least some pieces of land must be rigorously protected.

It is intended that the results of the work enclosed herein will be of value to both government land protection decision makers and environmental advocates or other nongovernmental organizations. It attempts to answer the question, why should Canada (or any other nation) bother to involve itself with the World Heritage Convention when the sites are already protected under domestic protection measures? In doing so it will help both governmental and nongovernmental bodies to best allocate their land protection efforts. As well, among the possible strategies that concerned planners and others could pursue to accomplish such ends as tropical rain forest preservation, protection of human rights, etc., the thesis questions whether the international agreement/convention is likely to be a valuable tool.

### 1.1 Methodology

The research style adopted was qualitative rather than quantitative and consisted primarily of an extensive literature review and personal interviews with key actors. The author's interview style was greatly influenced by Murphy's (1980) discussion of interview techniques for evaluators and policy analysts. A list of interview subjects, their affiliations and the date of the interview are included as Appendix 1. As much as possible, the primary decision making bodies were represented in the interview process. If interviews were not possible, written correspondence and telephone calls were used, although they were mainly used to obtain factual information (e.g., regarding the use of various forms of domestic legislation, etc.).

### 1.2 Argument Outline and Basic Assumptions

The present thesis consists of seven chapters in total. Chapter 2 critically examines the wealth of arguments for the protection of land. It accepts ten arguments for the protection of land, and uses those arguments to develop ten criteria which are used to evaluate the efficacy of the World Heritage Convention as compared with domestic protection methods. Standard criteria used to evaluate environmental

policy processes are rejected in favour of the newly developed criteria due to the focus on particular policy outcomes rather than on the more usual focus on the decision making processes.

Chapter 3 identifies the resource conflicts in and threats to the Canadian Rockies. It also describes the Rockies ecosystem and the history of use and protection in the region. The Rockies case provides a context in which to examine the efficacy of the World Heritage Convention.

Mechanisms for the protection of land are reviewed and briefly evaluated in Chapter 4 with regard to their recent effectiveness in accomplishing the long-term protection of whole ecosystems. Domestic protection methods, including those used by the federal government, the B.C. and Alberta governments, private organizations and native people are seen to be commonly inadequate for rigorous protection. International methods are also considered. A detailed description of the features and protection potential of the World Heritage Convention is reserved for Chapter 5. Canada's role in the development and ongoing use of the convention is also included in that chapter.

Chapter 6 describes cases, particularly the Australian Gordon-Upou-Franklin dam case, where the World Heritage Convention has been known to make a tangible difference with regard to the protection of land. The Australian dam case

serves as a particularly good model of the way that the World Heritage Convention might be used in Canada if a site was threatened with serious resource degradation.

The final chapter describes the establishment of the Canadian Rocky Mountain Parks World Heritage Site, and compares the World Heritage Convention to domestic protection measures in light of the ten criteria developed in Chapter 2. Conclusions list the advantages and disadvantages of the World Heritage Convention for Canada. The global nature of the convention is discussed and the implications for other nations and other international agreements/conventions are also discussed.

Several assumptions and definitions underlie the arguments contained within the present thesis, they include the concerns which follow. The term "whole ecosystems" does not refer to the type of definition used by Spurr (1969: 3), i.e.,

A natural resource ecosystem is an integrated ecological system, one element of which is a product of direct or indirect use to man. The product may be biological as in the case of forests, ranges, agricultural products, fish, and wildlife; physical as in the case of water, air, and soil; or both. In all cases, the distinguishing facet of a natural resource ecosystem is that man has a direct involvement in the complex set of ecological interactions.

The definition used herein does not necessitate the involvement of humans in the ecosystem. Whittaker notes that,

A community and its environment treated together as a functional system of complementary relationships, and transfer and circulation of energy and matter, is an ecosystem (Whittaker, 1975: 2).

To expand this definition, Abercrombie, Hickman and Johnson define an ecosystem as,

A community of organisms, interacting with one another, plus the environment in which they live and with which they also interact; e.g., a pond, a forest. A system consisting of producers, autotrophic organisms (mainly green plants), consumers, heterotrophic organisms (animals) and decomposers, heterotrophic organisms (chiefly bacteria and fungi) latter breaking down dead organisms, absorbing nutrients for growth and releasing nutrients to environment for use by producers; all of these activities being influenced by physical conditions of environment (Abercrombie, Hickman and Johnson, 1975: 93).

The latter two definitions are accepted by the present work. Throughout the work being "ecosystematic" refers to an approach that protects the given ecosystem so that it might remain free to interact as it would naturally, that is, without human interference.

"Universal value" refers to a feature which is sufficiently rare or of sufficiently high quality that it is only comparable at a global level, rather than at a local level. Examples might include the presence of a particularly rare species of animal in an undisturbed portion of its preferred habitat, or a rare collection of paintings representing a single period of art



history that is not well represented elsewhere. The definition corresponds to the dictionary definition of the word "universal",

Relating to the entire universe; of or pertaining to things or persons regarded collectively or distributively; belonging to the whole earth or to all human beings; all-embracing; unlimited; general. ... (Funk (ed.), 1951: 1429).

Universal significance always pertains to the value humans place on a given object or collection of objects.

The major assumption made throughout the present work is that the protection of land from human influence is valuable. It is recognized that such an assumption contains a value judgement, but it is that author's opinion that no planning can be truly value-free. It is contended that it behooves the planner to be explicit about his/her biases in order that his/her client(s) are aware of the underlying premises behind the work they receive.

## CHAPTER 2: RATIONALE AND CRITERIA FOR THE RIGOROUS PROTECTION OF LAND

### 2.0 Introduction

The previous chapter introduced the focus of the thesis, that is, evaluating the World Heritage Convention as a method of ensuring that land which is protected is truly excluded from destructive uses so that the site can fulfill the goals for which it was originally protected. The purpose of the present chapter is to critically examine the arguments for the protection of land and to draw up some broad criteria to use in evaluating the various methods for the protection of land described in Chapter 4. The thesis takes the normative stance that the protection of land is a worthwhile goal of a land planner/manager, and thus advocates criteria designed to effect rigorous protection of sites.

Land is assumed to provide the base on which ecological processes may occur when left alone by humans. Protection of marine ecosystems is more difficult because of the influence of distant actions (e.g., the influence of the moon on tidal action, etc.). Marine ecosystems are not considered in the present work, and mechanisms for their protection could easily provide a topic for an additional thesis treatment. The influence of management and other actions (e.g., air and water pollution) pertaining to land outside the site of

interest should not, but will be ignored in the present work: only actions pertaining to the specific site of land will be expected to influence the ability of the land to perform its functions in the total ecosystem.

## 2.1 Evaluation of Protection Rationales

"Multiple use" of land has become a common buzz word in Canadian resource management in recent years. It maintains that the entire variety of resource uses may be accommodated in a particular area so as to avoid resource conflicts and ensure the highest and best use of the entire region. Recently the idea of bringing groups together to "divide up the pie" in a way that reduces resource conflicts has come into favour. One example of the use of multiple use techniques is the designation of Integrated Resource Management Units on B.C. provincial forests provided for by section 4 of the Forest Act (R.S.B.C. 1979, Ch. 140) (Kent Anders, B.C. Forest Service, pers. comm.). In the multiple use system, reserves for ecological purposes are generally considered unnecessary (cf. Keenan, 1984) as most "good" wildlife species (e.g., deer, elk, etc.) thrive under multiple use management and reserves meet the needs of only a small number of elitist ecofreaks in middle and upper income groups. The various resource interests, forestry, mining, hydroelectric development, etc., are considered to make a

valuable contribution to the economic benefit of all Canadians as has been demonstrated by multiple use management in other countries. As Keenan (1984) writes,

To contemplate maintaining great areas of wilderness, to the exclusion of resource development, is nonsense. The economy of British Columbia is almost totally dependent on the exploitation of the natural resources of lumbering, wood processing, mining and fishing. This is why we are here, to wrest our living from the mighty environment which surrounds us . . . (Keenan, 1984: 136)

Keenan's arguments centre around the elevation of humans above the rest of biological creation on the earth, that is,

If the earth did not harbour such a highly intellectual species as man, then no one would, in truth, disagree with the ideology of leaving nature alone to work out its own destiny, just as it took care of the dinosaurs and those thousands of other extinct species, lost without the interference of man. But man is a breed apart and because of his intellect, has needs over and above those of the pure animal kingdom. The inevitable truth is that we have an intellectual society and its needs must be given priority over the laws of the jungle (Keenan, 1984: 196).

In contrast to Keenan's arguments, the present work asserts that the species Homo sapiens is only one of the many species which inhabit the complex troposphere of the planet Earth. The critical element is the functioning of humans within the earth's total system. Humans, because of our highly developed brain capacity, do have an ability to influence our environment to a degree that is incongruous with our physical size and strength. As well, because of a long history of influence on our environment, humans have become the managers of human, plant and animal activity on

the globe through the establishment of agriculture, animal husbandry, and the management of renewable and nonrenewable resources. The present work argues that there should be some areas of the globe where humans purposely allow natural ecosystematic processes to have priority. Those areas are the protected lands referred to throughout the work. Unless humans leave some areas to perform their natural role in the ecosystem, we may be justifiably accused of the arrogance of humanism (Ehrenfeld, 1978).

In contrast to the multiple use approach to land management which has had to be used in Europe due to the human impact on almost all areas, Canada still has some choices left about how land is to be used, especially in some relatively untouched areas in the Rockies and the northern part of Canada. Wilderness areas must be treated as Canada's "crown jewels". The development of resource extractive industries has prevailed in many areas because the benefits of the activity can be measured in terms of the direct and indirect economic value and jobs created. The values associated with the protection of land can seldom be technically measured or economically justified. The primary values are ecological and social. Because ecological and social values are very difficult to measure, alternative rationales support the protection of land.

Of concern to writers like Tucker (1982) is the reflection of aristocratic ideals which the reservation of land from resource extraction and concerns about economic growth continue. The present work is not concerned about whose ideals are reflected in the actions towards land protection nor about whether the social class of the direct recipients of benefits from the protected areas is too heavily weighted towards the middle and upper income levels, nor whether everyone has access to the enjoyment of the protected area. The present work maintains that the protection of high quality sites is a goal which will directly (e.g., through visits) or indirectly (e.g., through the maintenance of species and a high quality environment and through "existence" value accruing from the knowledge of the existence of a protected area) benefit all people, regardless of social status. The question of the anthropocentric nature of most rationales for land protection is also not debated in the present work. The critical assumption is the normative acceptance of the value to all humans of the protection of land. Eleven arguments for the protection of land are identified hereafter. They are described and comments are made about them in the remainder of the section.

Of the traditional land protection rationales only one will be rejected for the purposes of the present work. The Resource Banking Argument is founded on

the basic premise that all (or many more than at present) trees, lands, waters, and minerals, may eventually have to be used by humans as commodity

resources, and it is thus a matter of sensible, conservative planning to set some aside for the future, or at least for the proverbial 'rainy day' (Pearsall III, 1984: 4).

As Pearsall points out, this argument has often backfired in that

sooner or later, the rainy day will come and the nature preserve becomes an oil-field, cobalt mine, or something else inimical to Nature (Pearsall III, 1984: 4).

A key example is the National Forest Reserve System in the U.S. wherein millions of acres of land were set aside in the late 1800s and early 1900s as National Forest Reserves for conservation, that is, long term sustained yield forestry. By the time the lands were used in the 1960s, however, it was understood by many that the land has been preserved for all time (Tucker, 1982). A local example of this sort of situation is the University of British Columbia's Endowment Lands which were endowed to financially support the university, but which have remained wild so long that they are seen by some to have more value as parkland. The Resource Banking argument is rejected in the present work because the normative emphasis is on the protection of land for all future generations. If the site's values are reduced by resource extraction the following generations are left to suffer the loss. The National Forest Reserve case typifies the current author's concern about the reasons for which a site is protected, and the length of time over which the protection method is effective.

Many different arguments for the protection of land are considered acceptable for the purposes of the present thesis because they result in little or no damage to the protected area. Several of the arguments raise questions which will be formulated into criteria in the next section. The criteria will be used to evaluate the various methods available for the protection of land, particularly concentrating on the World Heritage Convention's role in land protection in comparison with domestic protection methods.

The Ecosystem Services for Human Consumption Argument is somewhat similar to the Resource Banking Argument, but it is accepted in the present treatment. It assumes that,

the natural environment can be described in a number of ways, one of them being in terms of nutrient and hydrological cycles. These cycles maintain the oxygen, carbon dioxide, and nitrogen, levels in the atmosphere, preserve the fertility of the soil, maintain the flow of fresh water, and so on. Such cycles function most efficiently in relatively undisturbed ecosystems. Some of the anthropocentric values of these cycles are obvious (e.g. breathable air, drinkable water)(Pearsall III, 1984: 7).

Protected areas are the "relatively undisturbed ecosystems". Of concern are aspects of the arguments that concentrate on the importance of natural areas in

afford[ing] the possibility of greatly increased use of wild animals for high-protein food, through game ranching and other techniques using only marginal lands (Quigg, 1978: 9).

The argument is accepted because it is expected that the wild animals referred to would provide only the initial breeding stock, not an ongoing source of high-protein food. The



Ecosystem Services argument differs from the resource banking argument in that the services naturally accrue to humans without disturbance/management of the ecosystem. In the Resource Banking rationale, the services are only made available by disturbing the ecosystem. In light of what has been said about the two arguments, one criterion for looking at protection programs concerns whether resource extraction is taking place in a protected area.

The Pure Scientific Research Argument and the Resource Management Experiment Argument recognize the value of sites for pure scientific research and to test environmental management techniques. The techniques are usually for repairing areas which have been subjected to human disturbance, and for studies of population dynamics, population interactions, long-term succession, speciation, etc. which require undisturbed natural populations (Pearsall III, 1984: 3). This argument requires the protection of whole ecosystems, not the protection/management of an area for a specific species (or a few species) such as is done by groups like Ducks Unlimited. In a similar manner the Scientific Base Line Argument recognizes the value of protected sites to measure human impact on the environment and as tools for scientific education. As Franson writes,

simply by preserving examples of unique and typical ecosystems we will be providing a base line against which man's impact on his environment can be measured. For example, these areas will provide controls for measuring the build up of pesticides and other pollutants. . . . the reserves may serve an educational function by providing foci for

interpretive programmes for students and members of the public (Franson, 1975: 7 - 8).

It is valuable to question whether whole ecosystems or single species or small groups of species are being protected by the protection mechanism.

The Genetic Pool Argument values protected sites for their ability to provide pools of the genetic material of both plant and animal species for potential future use as food, pharmaceuticals or other resources for human use. It has been found that some domestic species, due to their highly manipulated breeding, have a lower capacity to adapt to changing environmental conditions and may be improved by crossing with wild species. An example might be the domestic strains of wheat which have been improved for use on marginal areas by crossing with wild versions. This argument also demonstrates the need for the protection of whole ecosystems.

The Aesthetic/Spiritual Argument recognizes the needs and desires of humans for an aesthetic experience with uninhabited land areas for observation of the natural environment in an undisturbed state. The spiritual values to humans of undisturbed land are very close to the aesthetic benefits: they are also recognized in the argument. As Pearsall III notes, the great naturalist/writers such as John Muir (the founder of the Sierra Club in the U.S.A.), Henry David Thoreau (1854) and Aldo Leopold (1949), emphasized the

aesthetic/spiritual benefits of land protection. Protection planners should ask whether the aesthetic/spiritual attributes of a site are being taken into consideration, although this is a very difficult aspect to measure.

The Low Impact Recreation Argument only values non-mechanized outdoor recreation. Related to the aesthetic benefits, recreational benefit is a common argument for the protection of sites as it may be a source of income for local business (e.g., outdoor activity supply stores, hiking/hunting/fishing guide-outfitters, etc.). A common philosophical debate arises between those who are interested in non-mechanized forms of outdoor recreation (e.g., horseback riding, hiking, cross-country skiing, backpacking, canoeing, sailing, etc.) and those who see no problem with the use of mechanized recreational devices (e.g., four-wheel drive vehicles, all-terrain cycles, snowmobiling, downhill skiing, motor boats, etc.) in wilderness areas. Non-mechanized recreation which has a low impact on the natural environment is acceptable in the present argument. It necessitates asking about which forms of recreation are allowed in a protected area under different protection regimes.

The In Absentia Benefits Argument has three aspects:

a) residual benefits resulting

from assimilative processes that begin in situ or after visitors have left the preserve and which have a residual impact on the beneficiary for some time after his or her leaving (Pearsall III, 1984: 4);

b) vicarious benefits obtained as a result of another's visit, regardless of whether the person has visited the site; and,

c) non-use benefits to a person who need not have visited the site, or vicariously benefitted from the experience of others, but who values the existence of a habitat/species/site regardless of any possible use by themselves or by any other human being. This argument is also known as "existence value", and includes the provision of "ecosystem services" (described above), but primarily for the benefit of the non-human, natural inhabitants of the protected area. It also includes the aesthetic/spiritual argument, but differs from that argument in that aesthetic values need not be present (e.g., the value to the person may be as a refuge for a particular slug species which is not aesthetically valued by that person).

Questions about the values being considered in the protection of land are raised by the in absentia arguments.

The "Oneness" Argument was described by Livingston (1981) as developing between humans and the natural environment on the basis of individual human experience. Livingston rejects all of the rational arguments for wildlife preservation, arguing in favour of a knowledge based on a combination of

reason, experience and emotion so that when a wild creature (or in this case, land area) is endangered/threatened by human action, the creature is so much a part of the individual that they feel as if they are also being endangered. This reason is intended to transcend the anthropomorphic arguments for protection and also recognize aesthetic/spiritual benefits to the person. Very closely allied, but not identical to, the Oneness argument is the Biotic Rights Argument which recognizes the need to leave some areas alone because they have an intrinsic right to exist, regardless of human uses or benefits (Devall and Sessions, 1985).

The previous pages describe numerous arguments for the protection of land. Economic benefit and job creation are not directly among the arguments, but may be an indirect result of land protection, for example, supplying outdoor equipment for low impact recreation. It is the author's view that our natural environment may eventually be so influenced by human activity that the losses in species diversity may knock the entire earth out of its present tenuous, relative equilibrium.

The next section takes the arguments presented herein and adds knowledge of the current land protection situation to produce criteria to evaluate schemes for the protection of land.

## 2.2 Evaluation Criteria for the Protection of Land

The field of natural resource planning has spawned numerous evaluation schemes which are in standard use in evaluating a wide variety of resource management issues. Fox (1976) recommends the use of four criteria in his evaluation of water management institutions:

1. representation of legitimate interests;
2. adequacy of information;
3. efficiency; and,
4. effectiveness.

Fox, Eyre and Mair (1983) assume the following underlying concepts in their evaluation of the requirements for an effective planning and management process for Yukon water resources:

1. inalienability of individual rights,
2. requirement for fair treatment of individuals and groups,
3. equal merit of preferences/priorities of all affected individuals, and the need for informed responses to be communicated to the accountable decision maker.

In evaluating decision making mechanisms for northern Canadian resource development, the Couchiching Study Group (1978) used such criteria as the openness of the process, broad scanning of alternatives, full ecological assessment of options, full participation of affected parties, political

accountability, and consideration of "no-go" options.

Several common themes (e.g., accountability, opportunities for the involvement of legitimate interests, etc.) run through the three different evaluative schemes listed above. However, for the purposes of the present work, all three of the schemes will be rejected. The key problem with the three evaluative frameworks is that they focus on decision making processes while the present thesis focusses on the outcomes of decision making. As Samuels (1972) notes,

The problem of design and management is to set up control systems to effectuate ecological policy. The control systems can be designed to effectuate certain particular ecological ends or they can be designed to themselves select the ecological ends. The ends which each designed system tends to produce will be different.

The present work is concerned with effectuating particular ends not in designing selection mechanisms. The thesis takes a particular normative stance that rigorous protection of land is intrinsically valuable. As well, the criteria mentioned above are best suited to the evaluation of broad policy issues, and would be suitable if the thesis were evaluating the range of land management policies in a particular area. A good example might be evaluation of the Four Mountain Parks Planning Process and/or the Policy for the Resource Management of the Eastern Slopes in Alberta. The topic of the present work is too specific in its concentration on evaluating the efficacy of the World Heritage Convention in protecting land. As a result, new

criteria for the evaluation of land protection schemes are developed from the arguments in Section 2.1 and from the author's concerns about the current methods used to protect land.

The Ecosystem Services for Human Consumption Argument leads to the question, is resource extraction currently taking place, or is it expected to take place? The Low Impact Recreation Argument similarly leads to investigation of the types of recreational activity which will be permitted in the area and their relative impact on the environment.

As a result of the Pure Scientific Research, Resource Management Experiment, Scientific Base Line and Genetic Pool Arguments, it is important to ask whether complete ecosystems or single species (or small groups of specific species) will be emphasized by the protection method. The Aesthetic/Spiritual, In Absentia, "Oneness" and Biotic Rights Arguments prompt questioning as to whether aesthetic/spiritual or other human values occasioned by the protection of land have been taken into consideration. The Resource Banking Argument raises a question of whether the protection method is ongoing, protecting land in perpetuity, or is it for a limited period of time.



Concerns about the actual use of existing land protection mechanisms form the justification for the criteria listed hereafter. The Man and Biosphere Programme (described in more detail in Chapter 4) designates broad sites which are not described in specific detail. This feature is considered one of the program's weaknesses because it does not permit legal punitive action if the site is disturbed or destroyed. It has led to questioning whether the site is legally recognizable, that is, does it have particular geographical coordinates which are recognized by law?

Several protection methods set land aside entirely on the basis of a few of the many possible reasons for protecting land, and the reasons behind the choice strongly influence the management of the site. As an example, municipal or class C provincial parks in British Columbia are set aside only for recreational purposes, and management activities reflect that reason by emphasizing extensive recreational development of the parks. The International Biological Programme also emphasizes research and genetic pool arguments to the exclusion of opportunities for low-impact recreation, or other uses of the site. The question thus arises, is the land protected for a variety of the reasons accepted in Section 2.1, or is a single (or few) reason(s) the basis of the reservation of the land.

Observation of the high degree of political activity surrounding land protection in the British Columbia Parks Branch, Alberta Recreation and Parks and Parks Canada, especially with respect to variations in funding for land acquisition and management, have led to the question, are the sites and protection methods subject to financial and/or political expediency? Similarly, sites are often selected for protection on the basis of their representativeness of a particular set of ecological features. In many cases the protection of some area, which may be represented to a minimal degree by an existing park, is not permitted because it is felt that the existing park offers sufficient representation of that set of ecological features. It is the author's contention that the methods to ensure representative examples of all major ecological groupings should serve as a basis for comprehensive protection of the full range of ecosystems, but should not serve as a way of excluding areas from being protected for their intrinsic value. An example might include the Canadian Rockies region which is represented by at least five national parks. It is unlikely that even a prime, threatened area in the Rockies would be protected as a national park because the region is seen to be adequately represented in the existing system. The question arises, is the site protected primarily on the basis of its intrinsic value rather than exclusively on the basis of its relative value on the scale of the protection method concerned, for example, with National Parks, is the site only representative of a Natural Area of Canadian Significance?

The numerous criteria described above provide a way to evaluate the degree to which rigorous protection is afforded by various protection methods. Chapter 4 uses the criteria developed in the present section to evaluate the range of federal, provincial and international protection measures available to protect the Canadian Rockies, which are identified as a sensitive and significant area with many resource conflicts in Chapter 3. The evaluation in Chapter 4 takes particular note of the use or lack of use of each protection method to protect additional portions of land in the last three to five years.

### 2.3 Summary and Criteria List

Section 2.1 rejects only the Resource Banking Argument for the protection of land. It accepts the following arguments; Ecosystem Services for Human Consumption, Pure Scientific Research, Resource Management Experiment, Scientific Base Line, Genetic Pool, Aesthetic/Spiritual, Low Impact Recreation, In absentia Benefits, Oneness and Biotic Rights. From examination of the criteria developed in Section 2.2 as an extension of the arguments for the protection of land, and from consideration of land protection programs as a whole, four main issues arise. These issues should be considered in evaluating the difference(s) between

domestic land protection schemes and the World Heritage Convention. The issues are related to

1. the types of activities permitted under the land protection scheme,
2. the inclusiveness of the purpose(s) for which the sites are designated,
3. the strength of the protection measure, and
4. the implementability of the land protection scheme.

The issues provide a simple framework within which the criteria may be organized for ready access, as indicated below.

In examining the types of activities permitted under the land protection scheme, two criteria should be examined:

Criterion 1: Nature of Permitted Recreational Activities. By the arguments raised earlier, these should be restricted to those that are non-mechanized.

Criterion 2: Nature of Permitted Resource Extraction.

The previous discussion recommends permitting no resource extraction.

The inclusiveness of the purpose(s) for which the sites are designated suggest four criteria:

Criterion 3: Scale and Scope of Protection. Emphasis should be placed on the protection of whole ecosystems, in recognition of an ecosystem's intrinsic biotic rights, over the protection of single species or small groups of specific species.

Criterion 4: Inclusion of Non-Utilitarian Values.

Recognition should be made of aesthetic/spiritual human values.

Criterion 5: Breadth of Purpose. Sites which are protected for a variety of the reasons accepted in Section 2.1 are preferred over sites which are protected for a single (or a few) reason(s).

Criterion 6: Intrinsic Value. Sites protected on the basis of their intrinsic value are emphasized (i.e., a site protected for its own sake regardless of whether similar ecosystems are already protected).

With regard to the strength of the protection measure, three criteria apply:

Criterion 7: Durability. Protection methods which are of limited duration are superceded by methods which are ongoing, protecting land in perpetuity.

Criterion 8: Definability. In light of the features of the MAB program described in this chapter (and more fully described in Chapter 4), preference is given to sites which are legally recognizable, that is, they have geographical coordinates which are recognized by law. In most cases this is an unimportant criterion as the sites are carefully designated geographically.

Criterion 9: Susceptibility to Political/Financial Expediency. This criterion will be more fully explained in Chapter 4 where the variety of protection methods available in B.C. and Alberta are described, and their use in recent years is examined.

The implementability of the land protection scheme becomes a criterion itself:

Criterion 10: Implementability. Preference is given to a scheme which is more likely to easily surmount the hurdles of opposition which any public action faces.

## CHAPTER 3: THE CANADIAN ROCKIES PROBLEM

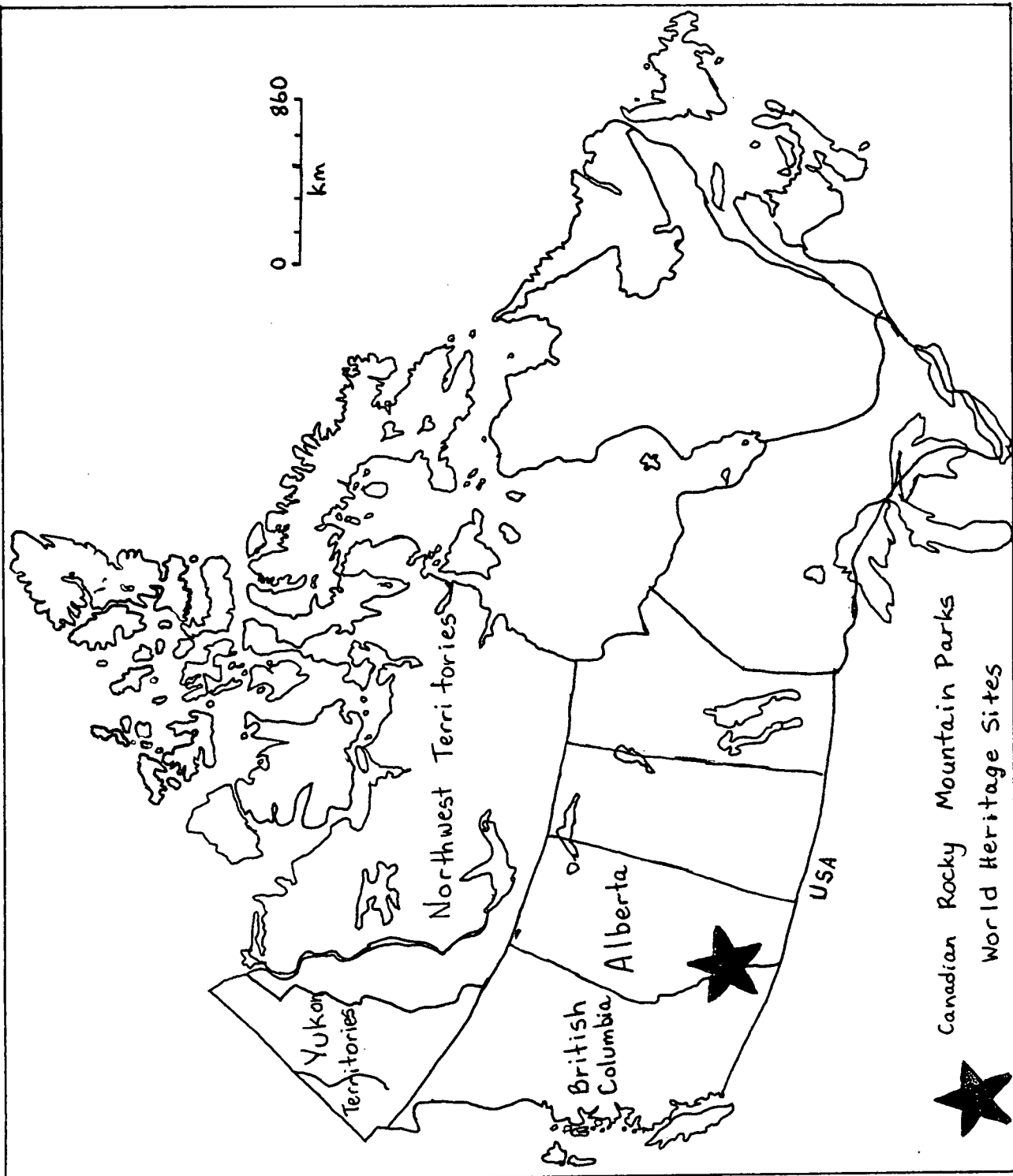
### 3.0 Introduction

The purpose of the present chapter is to describe a particular ecosystem (the Canadian Rocky Mountains) and recent threats to that ecosystem's integrity. It provides a context in which to evaluate the effectiveness of the World Heritage Convention. Various mechanisms for accomplishing rigorous protection are reviewed in Chapter 4, and the World Heritage Convention's ability to effect protection is evaluated in the remainder of the thesis.

The Canadian Rockies as defined in the present chapter includes the area between the Rocky Mountain Trench in British Columbia and where the foothills grade into the prairie in Alberta and northern British Columbia, from the border with the United States north to the 60th parallel. Figure 1 outlines the area in relation to the rest of Canada. Information on the area is more readily available for the national parks in the region, but the whole region is of interest.

Section 3.1 describes the ecological and protection history setting in which the threats to the Canadian Rockies region, outlined in Section 3.2, occur.

FIGURE 1: A MAP OF THE CANADIAN ROCKIES REGION





### 3.1 The Setting of the Canadian Rockies

#### 3.1.1 The Ecological Setting and its Significance

The Canadian Rocky Mountains were created as a result of the movement of the continental plates by tectonic forces. The forces pushed up areas that were once ancient seabeds through combinations of faulting, folding and uplifting. Subsequent glacial action remolded, and is continuing to remold by existing remnant glaciers, the rock into the characteristic U-shaped valleys and glacial formations (e.g., moraines, eskers, caves, etc.). The rock types remaining consist mainly of shale, sandstone, dolomite, limestone, quartzite and slate dating from the Pre-Cambrian to recent times. The Castleguard Caves and Maligne River karst system are internationally significant areas of karst (water erosion of the limestone). The sedimentary areas contain an extensive fossil record, of which the soft-bodied fossils of the Burgess Shale layer found in Yoho National Park are particularly notable. The Burgess Shales, with their demonstration of Middle Cambrian evolution, were recognized as one of the most significant fossil sites in the world by designation as a World Heritage Site in 1981 (Environment Canada, Parks Canada, no date). It is hoped that National Park and World Heritage Site protection will save them from removal by random fossil hunters. The Rockies as a whole provide good examples of evolutionary history and geological

processes, of which few examples in the rest of the world have been left untouched.

The Continental Divide, which bisects the Rocky Mountains and contains most of the highest peaks in southern Canada, forms the headwaters of most western Canadian watersheds. Waters flowing west supply the Columbia River system before reaching the Pacific Ocean; north and east flowing rivers use the Athabasca River system and the Saskatchewan River system to supply Hudson Bay and the Arctic Ocean. The east flowing waters in the Saskatchewan River system form the primary source of surface water for the Canadian prairie provinces. Particularly with the droughts of the past few years, the necessity of maintaining the integrity of the Saskatchewan River watershed has been demonstrated. Dam projects or extensive logging in the Rockies could seriously affect the water flow regime in the river.

The Rockies experience long, cold winters and short, cool summers with intermittent hot spells. The Western Slopes are influenced by the moister maritime climate of the Pacific coast, resulting in generally heavier precipitation levels. The eastern foothills prevent arctic air from the prairies from hitting the mountains, and occasional chinooks (warm, dry winds which descend the eastern slopes of the Rockies in winter when a warm low pressure front from the Pacific ocean

moves over the mountains to replace a cold high pressure front on the east side of the Rockies: University of Calgary) also yield a more moderate climate on the Eastern Slopes.

The Rocky Mountains may be considered to support four major ecological groups known as ecoregions (Environment Canada, Parks Canada, 1983; Scharff, 1966; Patton, 1975; Lyons, 1976). The Aspen Parkland ecoregion comprises the lower parts of the eastern foothills and grades into the Prairie Zone in the easterly direction. Trembling Aspen (Populus tremuloides) and Balsam Poplar (Populus balsamifera) are characteristic trees of the Aspen Parkland. Above the Aspen Parkland to a height of 1300 to 1400 m, the Montane ecoregion dominates with its characteristic Lodgepole Pine (Pinus contorta), White Spruce (Picea glauca) and Douglas Fir (Pseudotsuga menziesii) forests and grassland areas. Between 1400 m and approximately 2200 m the Subalpine ecoregion grades from dense Engelmann Spruce (Picea engelmannii) and Subalpine Fir (Abies lasiocarpa) forests, with Lodgepole Pine present in younger successional stages, to open forests with stunted spruces and firs known as krummholz. Above approximately 2200 m, the harsh climate does not permit tree growth, so the Alpine ecoregion supports a wide variety of alpine shrubs and flowers, usually found in meadows during the short summer season. The broad variety of ecoregions and species demand protection for the types of reasons outlined in Chapter 2 of the present work, and especially, to support

the wildlife populations that depend on the availability of appropriate habitats.

The numbers and composition of wildlife populations in the Rocky Mountains have reflected changes in human attitudes towards wild animals. In the late 19th century and early 20th century the region's ungulates fed the many railway and exploration workers and predators were killed to keep game species abundant. Subsequent knowledge of the nature and reasons for declines in wildlife species led to the cessation of predator hunting and later to the elimination of all hunting in the national parks (Marty, 1985). Presently, Environment Canada (Parks Canada, 1983: 10, and McTaggart Cowan and Guiget, 1975) is aware of 56 mammal species in Banff, Jasper, Kootenay and Yoho Parks. They range from ungulates, such as moose (Alces alces), wapiti (or elk, Curvus canadensis), mountain goats (Oreamnos americanus), bighorn sheep (Ovis canadensis), woodland caribou (Rangifer tarandus montanus), white-tailed deer (Odocoileus virginianus ochrourus), and mule deer (Odocoileus hemionus hemionus), to carnivores, such as coyotes (Canis latrans), grey wolves (Canis lupus sp.), american black bears (Ursus americanus), and, grizzly bears (Ursus arctos horribilis), and to small mammals such as the snowshoe hare (Lepus americanus), rock pika (Ochontona princeps sp.), and pygmy shrew (Microsorex hoyi intervectus). The bighorn sheep (of which there is a herd of 2500) and the grey wolf are classified as vulnerable in the IUCN Red Book of Endangered Species.

The abundance and variety of large mammals is a particularly significant component of the Rocky Mountain region's overall value both biologically and as an attraction for the millions of annual visitors to the Rocky Mountain region. Many of the animals (e.g., grey wolf, grizzly bear) require extensive areas of undisturbed land to continue their existence. Especially due to the global rarity of some species (e.g., grey wolf, bighorn sheep), effective protection of the ecosystem is critical.

The variety of different environments available in the mountains (e.g., grassland, deciduous forest, mixed forest, wetlands, alpine meadows, etc.) provides seasonal habitat for over 280 species of birds, mostly during the summer months. The golden eagle (Aquila chrysaetos) and bald eagle (Haliaeetus leucocephalus), both declining in numbers on a continental basis, are present in the area. Amphibians and reptiles are poorly represented (e.g., one toad species, three frog species, one salamander species and three snake species), and fish are present, but not overly productive due to the cold, low-nutrient waters.

The combination of all of the aforementioned ecological features yields one of the most significant attributes of the Rocky Mountains, the breathtaking beauty of the area. It is difficult to describe, and personal experience is almost

necessary. The seemingly untouched beauty of the Rockies area has become a common symbol in the material used by Canadian tourism organizations in advertising outside Canada. It has been and is used for aesthetic purposes by many people in the artistic fields. Such painters as Group of Seven artist A. Y. Jackson , James B. Spencer (Thurston, 1984) and Carl Rungius (Whyte and Hart, 1985), have used the Rockies as a source of inspiration. Many people in the artistic fields of painting/drawing/sculpture, music, drama, and dance annually make use of the facilities of the Banff School of Fine Arts and its setting for the development of their talents. As Chapter 2 argues, the necessity to provide some areas for aesthetic purposes is admitted by even some of the strongest opponents of protected areas.

The Rockies provide resource managers with an uncommon opportunity to deal with land that is, in large measure, undamaged by human action. The cleanliness of the surface water sources, the wide variety of plant and animal species which use the area, the presence of mammals which require large areas of undisturbed land, and the beauty of the mountainous terrain all contribute to the special attributes of the wilderness present in the Rockies.

### 3.1.2 The History of Use and Protection in the Canadian Rockies

Luxton (1975) notes that several tribes of native people inhabited the Rocky Mountain area before contact by explorers and traders began in the mid 18th century. Little is known of the native's way of life except that which has been passed on orally. The Siouan nation was represented by the Stoney Indians (also known as the Assiniboine) who were pushed westward from their traditional territory, which spread from the Red River to the confluence of the North and South Saskatchewan River, by the Blackfoot (of the Algonquin nation) to the area near Jasper National Park. The Blackfoot, along with the Blood and the Piegan (also Algonquin people), inhabited the area south of the Saskatchewan River to the Missouri River and from the Red River to the Rockies. The Sarsi, of the Athapascans, were Blackfoot allies. The Crees, also of the Algonquin nation, but using a different dialect and inhabiting the area from Hudson's Bay and Athabasca Lake to the Rockies, sided with the Stoney people against the Blackfoot and their allies. The Kootenay and Shuswap (of the Salish people) were pushed to share the area on the westward side of the Rockies.

All these tribes were nomadic people, their tipis and few possessions easy to move. The buffalo supplied all their needs, food, tipis, clothes, mocassins and robes. Originally, the Indians hunted buffalo on foot with bows and arrows. ... After horses came, there was a running hunt, where the Indian killed from horseback. Other times a large group of Indians would stampede the buffalo over cliffs or high river banks. Some animals died in the fall or were trampled by

others, and Indians at the bottom killed incapacitated animals. Though popular, it was a wasteful way to kill (Luxton, 1975: 22).

Once driven west, the Kootenay also fished and hunted for deer, moose, mountain sheep, mountain goats and game birds, and trapped for smaller mammals. All tribes used roots, berries, mosses and barks as food and/or medicine. Some local muds were used as is or burned to produce various colours of body and face paint.

The native people used the hot springs found throughout the mountains for bathing and possibly for ceremonial purposes. It was one of those springs, which was discovered by fur traders Willard Burrill (Peter) Younge and Benjamin Pease in December, 1875 on advice from the Stoney Indians. It was first used (by Europeans) by three railway workers, Franklin McCabe, William McCardell and Thomas McCardell on November 8, 1883, which led to the development of the first national park in Canada (the third in the world after parks in the U.S.A. and Australia)(Marty, 1984)). Notables like Sir Sanford Fleming and William Cornelius Van Horne came to the area due to the construction of the Canadian Pacific Railway, and advocated the establishment of parks as "a source of general profit", envisaging a Canadian Switzerland (Marty, 1984: 32). Following a buy-out settlement with McCabe and the McCardells, who had been attempting to stake a mineral claim or homestead the springs site while catering to numerous bathers, the Canadian federal government placed a



park reserve on the land. Order-in-Council No. 2197 on November 28, 1885 reserved a ten square mile area, including the springs, under the following terms:

His Excellency by and with the advice of the Queen's Privy Council for Canada has been pleased to order, and is hereby ordered, that whereas near the station of Banff on the Canadian Pacific Railway, in the Provisional District of Alberta, North West Territories, there have been discovered several hot mineral springs which promise to be of great sanitary advantage to the public, and in order that proper control of the lands surrounding these springs may be vested in the Crown, the said lands in the territory including said springs and in their immediate neighbourhood, be and they are hereby reserved from sale or settlement or squatting (Marty, 1984: 41-42).

The Rocky Mountains Park Act (1887, 50 - 51 Vic. C. 32 (1887)) received Royal Assent on June 23, 1887, thereby establishing Rocky Mountains National Park, "as a public park and pleasure ground for the benefit, advantage and enjoyment of the people of Canada (Environment Canada, Parks Canada, 1983: 3).

Over time, not only the name and boundaries of the Rocky Mountains National Park (now Banff National Park) changed, but the attitudes of those people associated with parks changed from the original emphasis on resource development and profits to the current understanding of resource protection within parks. The first demonstration of the change was associated with people's attitudes towards wildlife, especially as it was demonstrated in the management of wildlife in the national parks. As Foster notes in her

history of the changes in wildlife policy over time,

There was no formal concern for wildlife preservation expressed by the federal government in the nineteenth century, yet, during the closing years of that century and throughout the first two decades of the twentieth century, an awareness began to evolve and take shape in government thinking. The realization was dawning that Canada's wildlife resources were not unlimited and that certain species, far from being superabundant, were declining into extinction. With this realization came a growing sense of responsibility on the part of the federal government to preserve and protect Canada's wildlife resources. That responsibility was voiced and discussed during the first National Wildlife Conference, convened by the government, in 1919. Three years later, the responsibility was formally assumed and wildlife conservation became part of regular government policy (Foster, 1978: 13).

The new federal government policy was first initiated in national parks, and several federal parks people were among those who were instrumental in effecting the key attitude change noted above. They included: Howard Douglas, appointed Superintendent of Rocky Mountains Park in 1897, who recognized wildlife both as a tourist attraction and as a valuable national resource (Foster, 1978); James Harkin, appointed Commissioner of Dominion Parks in 1912, who "had a clear and unfailing vision of what wilderness, parks and wildlife signified for the Canadian people in terms of both aesthetic and economic importance (Foster, 1978: 13)"; and, Maxwell Graham, "self-appointed chief of parks' three-man 'Animal Division'", who worked hard to preserve the pronghorn antelope and wood buffalo (Foster, 1978). The 1887 Parks Act had a clause relating to the "preservation and protection of

fish and game,[and] wild birds generally", but the government's policy emphasis on tourist use of the area took precedence (Foster, 1978: 16). A serious campaign against predators raged up until the mid 1930s. With the current National Park Act written in 1930, Harkin pushed for and succeeded in excluding the industrial exploitation of parks. It was not explicitly excluded in the legislation, although the 1930 act states that,

The Parks are hereby dedicated to the people of Canada for their benefit, education and enjoyment, subject to the provisions of this Act and the Regulations, and such Parks shall be maintained and made use of so as to leave them unimpaired for the enjoyment of future generations. (Section 4)  
(emphasis added)

Banff National Park, once 2590 ha (10 square miles), now covers 700,000 ha. By an order-in-council of October 10, 1886, 2590 ha (10 square miles) near Mount Stephen was set aside: it now comprises the 131,300 ha Yoho National Park. Waterton National Park followed in 1895 with an original reserve of 13,986 ha (54 square miles) near Kootenay Lake, now a 52,000 ha area. Canadian and American legislation in 1932 created the Waterton-Glacier International Peace Park, one of the first of its kind. 1907 saw the establishment of the 1,087,800 ha Jasper National Park, named after Jasper Hawse's Northwest Company trading post on the Athabasca River. The springs in the present Kootenay National Park had been used by travellers from the mid 1800s, but it took until 1920 to establish the now 140,600 ha park.

Provincial governments followed by establishing parks in the region. British Columbia created the 219,829 ha Mount Robson Provincial Park in 1913, the 39,052 ha Mount Assiniboine Provincial Park in 1922, and, the 24,518 ha Hamber Provincial Park in 1941. Alberta created the 459,723 ha Willmore Wilderness Park in 1970 (amended from the 556,589 ha area established originally in 1959), and the 50,309 ha Kananaskis Provincial Park in 1977.

The development of land protection mechanisms for the whole of Canada thus began in the Canadian Rockies region. As noted above, both federal and provincial land reservation schemes (described and briefly evaluated regarding their recent effectiveness in Chapter 4) have been used over the years. In total 2,905,131 ha of the Canadian Rockies are protected under various federal and provincial designations, so one might ask why it is necessary to worry about the protection of the Canadian Rockies. The following Section describes the reasons for worry about the Rockies region from a protectionist perspective.

### 3.2 Conflicts in the Canadian Rockies

The rich natural resource values of the Canadian Rockies described in Section 3.1 have led to the many conflicts associated with the use of the resources which are described herein. Provisions under Sections 91 and 92 of the Constitution Act (1867) place most of the responsibility for resources in the hand of the provinces: the Rockies are shared by British Columbia and Alberta. The dominance of the national parks in the region gives the federal government a greater role in the Rockies region than it has in many other regions of Canada south of 60 degrees. For this reason, the conflicts in the region are described in the present section under the responsibility of the dominant government (i.e., the Canadian, British Columbian and Albertan governments). Conflicts in the entire Rockies region are reviewed in order to set the evaluation of the Canadian Rocky Mountain Parks World Heritage Site in its regional context. Conflicts on land not subject to protective status are included as part of the examination because they reflect the land management issues in the region.

In addition to the shared responsibility for natural resources under Canadian law, the climatic differences briefly described in Section 3.1 have led to some differences in the resource conflicts in the two provinces responsible for the Rockies. The climatic differences have yielded some

substantially differing habitat types. As an example, the lower western slopes of the Rockies range receive a great deal of moisture so they support a luxuriant coniferous tree growth, while the eastern slopes, being in a rain shadow and chinook belt, receive less moisture and thus preferentially produce extensive areas of grassland and patchy deciduous tree stands. The difference results in the presence of conflicts with ranching and wildlife use of grassland areas in the Alberta parts of the Rockies, and the presence of forestry related conflicts in the British Columbia parts of the Rockies. Further differences are explicated in the provincial subsections below.

### 3.2.1 Conflicts Pertaining to Land Under Canadian Responsibility

Actions by Parks Canada respecting the national parks have been the subject of considerable controversy in recent years. The Four Mountain Parks planning process, which was established in the early 1980s to provide a comprehensive, long-term guide to activity within Banff, Jasper, Kootenay, and Yoho National Parks, has been subject to considerable criticism by environmental groups. The planning process was intended to counteract problems with provisional plans written in the early 1970s for the individual parks. The problems were generated by the fact that the four parks

tended to function as a block more than as separate individual parks (Don Pike, pers. comm.).

The efforts of the Four Mountain Parks planning staff have been seen by environmentalists as initially listening to a wide public view which was strongly in favour of protecting the national parks, but subsequently recommending a plan of action that would result in considerable development of the parks to primarily meet tourism needs for facilities development. Critics of the process are concerned that facilities development will reduce the wilderness values for which the area is renowned. Early activities of the planning team included considerable formal and informal consultation with the public by team members, and freedom for the team members to adjust management options to the perceived consensus on preferred actions. A change in senior management in the Western region of Parks Canada resulted in the establishment of three options in each sub-area, whether the planning team considered it appropriate or not. In July of 1984, prior to the completion of the last round of public involvement, a document leaked to environmental groups indicated that despite their recognition of conflicts with strong public consensus on some actions, the Parks Canada managers intended to recommend a plan of action which was in some cases deliberately contrary to public opinion. In addition, invitational meetings with a strong emphasis on representation by the tourism industry were held in November

and December of 1984. The majority of environmental groups invited to the invitational meetings boycotted the meetings due to the perceived motives of the Parks Canada senior staff. These were the only public meetings where senior Parks Canada staff were present: previous public meetings had been attended by planning team members who were seen by senior staff to be "filtering" the public responses towards a protectionist bias. The public outcry engendered by the invitational meetings forced the public involvement process to be extended into a new set of general public meetings in the spring of 1985. The plan is as yet incomplete, but to date it is seen by environmental groups to be highly slanted towards an emphasis on increased visitor use of both backcountry and frontcountry areas in the national parks to the consistent detriment of wildlife. Two reports of the Canadian Wildlife Service evaluated in detail the various options produced by the planning team and recommended that the more development oriented options would have major negative impacts on wildlife (B. Briscoe (CWS) to S. Kun (Parks Canada), July 24, 1984 and N. Tywoniuk (CWS) to S. Kun, January 31, 1985). The latter letter was the subject of considerable controversy as it was first made public by a conservationist group and was claimed to be fake. Later investigation revealed its authenticity (M. Lowey, 'Phoney' letter proves to be real, Calgary Herald, February 16, 1985) and the same article notes that,

it also provides site-specific examples that corroborate conservationists' view that Parks Canada's emphasis on development could damage the park environment and harm wildlife.



Two additional concerns that affect the national parks and areas leading into the national parks are the twin tracking of the Canadian Pacific Railway and the widening of the Trans Canada Highway to four lanes through Banff and Yoho National Parks. The railway twin tracking and the widening of the highway are destroying valley bottom habitat of overwintering wildlife, particularly ungulates (Steve Herrero, University of Calgary, School of Environmental Design: pers. comm.). It is hoped, though, that road kills, a common problem in the parks, may be reduced by the placement of high fences on both sides of the widened highway. The removal of cabooses, from which railway staff may spot sparks thrown from the train which may ignite forest fires, has also been threatened by the railway company.

Numerous additional problems (S. Herrero, pers. comm.) affect the natural components of the mountain national parks. Natural processes like fire and insect infestation are suppressed to protect human developments and forest stands. The loss of the Canadian Wildlife Service research staff perpetuates the inadequate knowledge of the wildlife relations to fire, insects, etc. Wildlife poaching is common at the boundaries of the parks, partly because there are insufficient numbers of wardens to patrol the areas thoroughly. The most difficult damage to monitor has been the incremental loss of pristine wildland areas caused by small developments and increases in visitor use of the

backcountry areas. The placement of alpine huts in the hands of private organizations has been seen by some as contributing to this concern (Dick Latta, pers. comm.).

Many environmental groups have taken an enthusiastic view of the replacement of former Environment Minister Suzanne Blais-Grenier by Tom McMillan, a self-avowed "environmentalist". Since his appointment, he has announced the establishment of a new national park on Ellesmere Island and expressed a desire to place the protection of the South Moresby area as a top priority. His previous cabinet post, however, was as Tourism Minister, under which auspices strong support was given to the development of facilities to support increased visitor use of the national parks in the document Tourism Tomorrow -- Towards a Canadian Tourism Strategy (1985). The final form of the Four Mountain Parks Plan is questionable in light of McMillan's sensitivities to the tourism perspective. Canada's national parks (and provincial parks to some extent) are seen to be the primary focus of our nation's efforts at the protection of our natural heritage (Stephan Fuller, pers. comm.). What is of concern to the present author is the uncertainty about the strength of federal protective measures occasioned by the discretionary authority held by the federal Environment Minister. Former Environment Minister Blais-Grenier's comments with regard to the possible acceptance of resource extractive activity in national parks are indicative of the extent to which

ministerial interests can undermine the intent of legislation.

### 3.2.2 Conflict Pertaining to Land Under British Columbia's Responsibility

Numerous conflicts exist in the British Columbian Rockies. Of particular importance are the problems associated with the extraction of coal which included the direct alienation or degradation of fish and wildlife habitats and water and air quality, as well as the effects of the expansion of population to supply labour for the mining operations. Existing coal developments in the south east coal block included (John Dick, pers. comm.); West Star (Harmer Ridge), Fording Coal, Crows Nest Resources (Line Creek), Byron Creek Collieries, and Sage Creek. The first four are planning expansions if or when the market becomes more favourable to coal development. The Elko site is as yet dormant, but it has been approved for development. The north east coal block has the existing Tech and Quintet sites (the latter of which is expanding) and the following approved potential sites; Petrocan (Monkman), Utah Mines (Carbon Creek), British Petroleum (Sukunka) and three other sites that might be developed.

Forestry effects on fish, wildlife and water quality through the dumping of effluent in the water sources are somewhat abated by the slow economy in the province and the slow wood products markets (Linda Foubister, pers. comm.). An exception may be areas of insect attack. In the latter areas, which are quite widespread, salvage operations are recovering as much from areas attacked by mountain pine beetle and mountain spruce beetle as possible, but are prematurely harvesting the areas and denuding the forest (John Dick, pers. comm.). As mentioned previously, agriculture is not a major problem on the western slopes of the Rockies due to the dense forest growth.

A dam has been proposed for the Kicking Horse River near Field to replace the use of diesel generators and it would eliminate winter flows of the river to the detriment of fish populations. Petroleum and natural gas development is going on in many areas and specific sites are too numerous to list (J. Dick, pers. comm.). The exploration and drilling processes result in the proliferation of unmanaged access to areas and affects fishing, hunting and water quality due to the construction of access roads and the lack of control of those roads. It is expected (John Dick, pers. comm.) to affect native populations of Dolly Varden and Yellowstone Cutthroat, moderately productive sportfish which are very susceptible to overfishing. While exploring for petroleum and natural gas, a major carbon dioxide reserve was found in

south eastern British Columbia. Shell Resources has proposed sending the carbon dioxide to Alberta for use in oil wells. One drawback may be the refining of the product near the reserves, which could result in the production of sulphur dioxide, a source of acid rain, or hydrogen sulphide, a toxic gas (Ken Hall, pers. comm.) as by-products.

Infrastructure development to support industrial activity has been a major problem because of direct habitat alienation and because of the problems (e.g., bear attraction) associated with sewage and garbage disposal through the development of "instant" communities (e.g., Tumbler Ridge). As well, the inhabitation of previously uninhabited areas tends to lead to increases in fishing and hunting in the area, thus affecting fish and wildlife populations. The increases in four season recreational developments in the Rocky Mountain Trench are expected to have a severe impact on elk and mountain sheep winter range, due to their location on south facing slopes which support the most winter range for large ungulates.

The major deterrent to increased human and industrial development in the region is the current economic scene which is not conducive to industrial development. Should the economic situation improve for business purposes, the industrial impact on the Rockies region could be expected to increase dramatically. The conflicts with wildlife and water

quality could also be expected to escalate. As D.E. Phelps of the B.C. Fish and Wildlife Branch wrote (letter, September 12, 1985) of the Rockies region:

The most significant problem is lack of any overall planning mechanism for land use decisions and resource allocations. This amounts to inadequate coordination not only between Provincial Ministries but also with other regulatory bodies.

The day to day site specific conflicts are primarily symptoms. Politicians, bureaucrats and the people have not yet come to grips with the myth of super abundance or the fragility of the land base.

### 3.2.3. Conflicts Pertaining to Land Under Alberta's Responsibility

The primary issue of the eastern slopes of the Rockies arises out of provincial land use policy actions. Unlike British Columbia which does not have a comprehensively applied land use policy or planning process, Alberta began to develop an eastern slopes policy in the early 1970s, culminating in the publication of A Policy for Resource Management of the Eastern Slopes in 1977. The 1977 policy placed primary emphasis on the management of resource use activity so as to protect the area's critical natural values of fish, wildlife and scenery. Most environmental groups were generally pleased with the policy and only criticized the misuse of areas subject to protective zoning until the revised version of the policy was published in 1984. But, the new policy has been seen by environmental groups like the

Alberta Wilderness Association (AWA) to emphasize the economic development of the region through such statements as:

The policy is sufficiently flexible so that all future proposals for land use and development may be considered. No legitimate proposals will be categorically rejected. Should a proposal not be in keeping with the provisions of the policy for that area, alternative means will be explored for accommodating the proposal in a more appropriate location in the region.

The ongoing integrated resource plans will make the policy work - to provide opportunities and stimulate economic growth and security while maintaining the key watershed and recreation values of the area (Alberta Energy and Natural Resources, 1984: iii).

It is not clear whether lobbying by groups like the AWA will result in movement away from the emphasis on economic development.

A government policy action which is expected to have an impact on the Rockies region is the Canada/Alberta Economic and Regional Development Agreement signed June 8, 1984. Under the agreement a \$56 million grant was made available by the federal government to the Alberta tourism industry. Combined with the Tourism Canada strategy referred to previously, the agreement is expected to increase the incentive to develop tourist facilities in all of Alberta, including the Rockies, a popular tourist destination. As it is, tourism and recreational development in areas such as Kananaskis Country, Willmore Wilderness Area and Panthers Corners threaten wildlife populations and water quality. In particular, the development of an alpine village and golf

course in the Mount Allen area for the 1988 Winter Olympics, and the use of the nearby Wind Valley area for privately owned recreational development is threatening mountain sheep, mountain goat and grizzly bear habitat. Helicopter use of areas designated as strongly protected areas in the 1977 Eastern Slopes Policy for heli-skiing and heli-hiking (AWA Draft Position Paper for Alberta's Environmental Groups on the use of Helicopters for Access into Alberta's East Slopes Zone 1 (Prime Protection) and Zone 1 and 2 (Critical Wildlife) Lands: 28 June, 1984) permits uncontrolled access and disturbs wildlife. Use of logging and oil and gas exploration roads by off-road vehicles is a critical problem due to the extensive system of minor roads present in the Rockies region. Off-road vehicle use may result in damage to water sources and uncontrolled fishing and hunting as well as road bed damage, especially on steep slopes, caused by the vehicles. Sites recognized to be of concern with respect to access by off-road vehicles by the AWA include; Whaleback and North Porcupine Hills, South Ghost, White Goat, Oldman River, Kakwa (in B.C. and Alberta), South Castle, Panthers Corners, and Job Lake to name a few sites.

Numerous extractive industrial developments have been proposed or initiated. New dam development in the region is proposed for the Three Rivers Dam at the confluence of the Crows Nest, Castle and Oldman Rivers. The water would be used to irrigate the area near Lethbridge, but it would have



to be pressurized for transportation. The Environmental Council of Alberta has indicated its view that the Three Rivers site is a very poor location for a dam socially, environmentally and economically (AWA Newsletter, 1984: 14(3): 4).

Drilling for oil and gas is permissible in even the most protected areas under the 1977 Eastern Slopes Policy as long as the site was proven before July, 1979. Oil and natural gas drilling with its ancillary road development is creating problems in the following areas; White Goat, Porcupine, South Castle, Panthers Corners, Novalta, areas surrounding the Oldman River, and possible problems at Harold Creek/Upper Red Deer River and Torrens River. Alienation of wildlife habitat due to coal mining is a problem at Folding Mountain and possibly at the Torrens River. The Kakwa area in British Columbia, a Class A provincial park proposal, is being threatened by a quartzite mine which would also affect Alberta's use of the area so is of interest to the AWA. As well, the development of a hydrogen sulphide plant which has been proposed by Canterra in the Panthers Corners area may create environmental problems.

Forestry affects the region not only by the removal of the trees, but also by the provision of access to otherwise inaccessible areas. It creates problems particularly in; Willmore Wilderness Area, South Castle, Upper Oldman River,

Whaleback and North Porcupine Hills, Upper Highwood Pass, White Goat, Folding Mountain and possibly from the Chalco Valley in B.C.

Grazing by domestic stock reduces winter range available to wild ungulates particularly in the South Castle and other undeveloped areas of the foothills where grassland is available for winter forage. The winter opening of the Upper Highwood Pass, expected to begin in 1985-1986, is anticipated to severely affect overwintering elk.

A few positive actions have been taken. The reclamation of an oil and gas exploration area by Shell in the Panthers Corners area was highly acclaimed by environmental groups (AWA Newsletter 1984: 14(4): 10-11). The establishment of Forest Land Use Zones (FLUZs) allows control over recreational use of backcountry areas with respect to horse/backcountry camping, use of snowmobiles and off-road vehicles by trappers, etc. FLUZs have been established for Kakwa, Wapiabi-Blackstone, Job Lake, Scalp-Forbidden-Clearwater, Panthers Corners, Ram-White Rabbit and White Goat. Drawbacks of the FLUZ designation include the lack of control over the recreational use of helicopters in backcountry areas, the temporary nature of the designation (it is only a one year trial designation), and the regulation only of recreational activity.

### 3.3 Conclusions

The previous section describes the diversity of threats which immediately affect the Rockies region. Federally controlled lands are subject to the potential damage to wildlife resources which may arise from the Four Mountain Parks planning process, the twin tracking of the Canadian Pacific Railway, the widening of the Trans Canada Highway, and increased recreational use of the national parks. In B.C. forestry, coal development, new town development, and recreational development have major impacts on the region, but their influence is somewhat slowed by the current business investment scene. Integrated planning of resource activities is lacking. Despite the efforts towards land use planning initiated by Alberta, many conflicts remain due to changed political priorities which influence the planning process. Both in B.C. and Alberta, the ecological resources of the Rockies region have been given a low priority by the government agencies responsible for land use management.

It would seem that despite the vivid images of the Rockies presented in tourist brochures of Canada, and relatively, for this continent, long record of conservationist activity, the Rockies region needs something more to ensure its rigorous protection for future generations. The next chapter examines the provisions available in the Rockies region for the protection of some

parts of the land base from the types of conflicts described in the present chapter in order to maintain the globally significant values of the region.

## CHAPTER 4: A REVIEW OF MECHANISMS FOR PROTECTION

### 4.0 Introduction

The purpose of the present chapter is to examine domestic and international land protection mechanisms available to Canadian resource managers and briefly evaluate their recent effectiveness in accomplishing long-term protection of whole ecosystems.

Numerous legal provisions exist in western Canada for the protection of natural areas (e.g., as documented in van Hees, 1983; Theberge, et al., 1980; and Province of British Columbia Ministry of Lands, Parks and Housing) and the extent of land protected under the variety of provisions in B.C. and the Yukon might be classified as substantial (Fraser, 1983). The present chapter evaluates the methods on the basis of the criteria developed in Chapter 2 and examines their use by the relevant agency or group in the last three to five years. Throughout the review of land protection provisions no consideration is made of the various review processes for permit/licence applications or other land use planning and decision making procedures which are provided for by government policies. They are reviewed in van Hees (1983) as nodes of influence for habitat protection. The current work rejects them as useful mechanisms for the protection of whole ecosystems as they assume that industrial or other

development will occur, only its impact on ecosystems will be subject to scrutiny.

Section 4.1 reviews national, provincial, private, and native forms of land protection that could be used to provide protection in the Canadian Rockies and evaluates them in light of their use in recent years. Threats to the entire Rockies region and to the Canadian Rocky Mountain Parks World Heritage Site are outlined in order to set the threats to the site in its regional context. International conventions and programs that relate to land protection are evaluated in Section 4.2 in relation to the World Heritage Convention. It will show that in comparison to them, the World Heritage Convention has basic potential advantages. These are outlined in section 4.3 and elaborated in the next chapter. The fundamental question in the two sections following will be: what are the possibilities and the constraint upon each mechanism as a process for rigorous protection.

#### 4.1 Domestic Mechanisms for Protection

The following section briefly reviews five different categories of domestic protection; measures under the federal government, provincial measures in British Columbia, provincial measures in Alberta, measures available to the private sector and measures available to native people.

Measures which might be used by Canada's indigenous peoples are briefly referred to although native people are not currently directly involved in land preservation for ecological purposes: through their land claim negotiations they are able to influence use of their land. Many legal provisions for the reservation of land, particularly at the provincial level, are not included in the present review as only those pieces of legislation that provide the opportunity for long-term, rigorous protection of a whole ecosystem are reviewed. Each of the mechanisms reviewed is evaluated in terms of its recent use.

As mentioned in Chapter 3, areas protected by the federal and provincial governments are influenced by the jurisdictional split between federal and provincial responsibilities in sections 91 and 92 of the Constitution Acts, 1867 to 1982. Due to the split, primary responsibility for land, wildlife, fresh water and other resources rests with the provincial government. Federal responsibility concentrates on nationally significant resources (e.g., marine fish and mammals, parkland of national significance, etc.) and internationally shared resources (e.g., migratory birds and mammals, etc.).

#### 4.1.1 Canadian Protection Opportunities

Environment Canada, through its agencies, the Canadian Wildlife Service for the Canada Wildlife Act (S.C. 1973, c. 21) and the Migratory Birds Convention Act (R.S.C. 1970, Ch. M-12), and Parks Canada for the National Parks Act (R.S.C. 1970, Ch. N-13), is the federal agency most responsible for environmental land protection. Land may be acquired for the establishment of National Wildlife Areas through section 10 of the Canada Wildlife Act, Migratory Bird Sanctuaries through subsection 3(1) of the Migratory Bird Sanctuary Regulations (C.R.C. 1978, Ch. 1036) provided for in the Migratory Birds Convention Act, and National Parks through section 6 of the National Parks Act. The Canada Wildlife Act and the Migratory Birds Convention Act provide for the protection of habitats used by specific species (although all species are protected in the protected area), while the National Parks Act provides for the protection of whole ecosystems.

The level of protection in National Parks depends on how they are "zoned" within the Parks Canada planning schemes. Parks Canada Policy (Environment Canada, Parks Canada, 1983) allows for various levels of activity in five National Park zones: Zone I (Special Preservation) areas restrict or deny access to areas/features deserving special preservation because of the unique, rare or endangered features; Zone II



(Wilderness) limit numbers of users and provide only primitive wilderness activity and non-motorized transport; Zone III (Natural Environment) can sustain low-density outdoor activities and little motorized transport; Zone IV (Outdoor Recreation) permit motorized access for a broad range of educational and recreational activities; and Zone V (Park Services) contain towns and visitor centres. Areas designated as national parks must first be identified as representative Natural Areas of Canadian Significance according to their portrayal of geological, physiographic, oceanographic and biological themes of a natural region at a national scale and have experienced little human modification (Parks Canada Policy, Environment Canada, Parks Canada, 1983). In sum, though, National Park, Migratory Bird Sanctuary and National Wildlife Area designations potentially offer strong protection to areas. However, protection of land under the aforementioned legislation has not been taking place at a great rate in recent years. With regard to the Parks Canada acquisitions, the Pacific Rim site, which has been the most recently acquired land in B.C. or Alberta, is only designated as a "National Park Reserve" pending land use agreements with British Columbia, forest companies and other interests which might include native interests (Wayne Crossen, Parks Canada, pers. comm.). Recent acquisitions have centred on the northern regions of Canada (e.g., the establishment of a new national park reserve at Ellesmere Island in September, 1985). Areas such as South Moresby

Island, which has been proposed for National Park status, and fits the requirements of the Parks Canada planning process as a National Area of Canadian Significance, have not been protected as parks (despite international interest through its proposal as a World Heritage Natural Site).

Canadian support for park status for South Moresby Island early in 1985 came not only from environmental groups but also from the then Fisheries Minister John Fraser (Vancouver Sun, February 7, 1985, A 18), yet the then federal Environment Minister, Suzanne Blais-Grenier, in a general letter about the South Moresby Island park proposal wrote,

Given the government restraint program, we will not be able to take immediate measures to secure the area. We are, however, continuing the development of a marine park policy and plans for a marine park in south Moresby.

As well, she proposed removing the area from the threat of logging by giving the company holding logging rights in South Moresby a sum of \$6 million, of which \$2 million would consist of private donations (Vancouver Sun, February 21, 1985, F 7). The latter statement engendered a good deal of negative response by a wide variety of environmental advocates and groups, with calls of "environmental blackmail", etc. Later, the Minister emphasized the fact that she was not setting new policy, just leaving the options open, "the important thing ... is to keep an open mind" (Vancouver Sun, February 21, 1985, F 7). As mentioned in Chapter 3, the new Environment Minister, Tom McMillan, is

moving towards the protection of South Moresby, but the susceptibility of national parks and park acquisition activities to ministerial discretion must remain of grave concern, for one can ask what will be the next Minister's attitudes. Events have already shown how susceptible to political winds South Moresby is.

Considering the substantial representation of the Canadian Rockies in the National Parks system, it is very unlikely that the National Parks Act would be a significant tool in dealing with current land use problems outside the existing parks in the region. Jim Hartley (Parks Canada, pers. comm.) noted that parks are being acquired primarily in areas not currently represented in the Parks Canada system, which in B.C. and Alberta would include the Okanagan, Upper Cariboo and marine areas. The political attitude has not been conducive to park creation until very recently even in the areas mentioned: South Moresby Island, adjacent to the marine environment, is a good example.

The Canadian Wildlife Service (CWS) in B.C. and Alberta is administered under two regional offices, the Pacific and Yukon Region (P&Y Region) which also includes the Yukon, and the Western and Northern Region which also includes Saskatchewan, Manitoba, and the Northwest Territories. In British Columbia, the migratory bird sanctuaries were mostly established fifteen to twenty years ago. National Wildlife

Areas have all been established in the last ten to fifteen years, but in the last five years the CWS in the Pacific and Yukon Region have not utilized federal money for land acquisition except in a cooperative program with the Province of British Columbia (who hold the land title) in the Sturgeon Bank area (Laszlo Retfalvi, CWS, P&Y Region, pers. comm.). Land acquisition and protection has become the responsibility of private groups, especially the Nature Trust and Ducks Unlimited (which does not acquire land, but is active in habitat protection), which subsequently jointly manage the areas with the CWS or the B.C. Ministry of Environment's Fish and Wildlife Branch. Examples include a 99 ha addition to the Spillimacheen National Wildlife Area, a 263 ha site on the Pitt River at the Addington Point Marsh, and many other sites to a total of over 3100 ha in 1983 (For all of us Forever, a brochure, National Second Century Fund of B.C., 1983).

Federal activity in Alberta shows a similar lack of recent land acquisition. Olynyk (1978) indicates that the most recently established migratory bird sanctuary was acquired in 1949, while Environment Canada (CWS, 1983) indicates that the most recent National Wildlife Area was acquired without cost from Parks Canada's excess holdings. Previous to that, land was most recently purchased in 1979.

The CWS experienced a cutback of 84 of 384 staff positions (22%) April 1, 1985 (Estabrook, 1985). As well, an internal review committee announced in the Throne Speech at the first session of the 33rd session of Parliament, November 5, 1984 (Mike McNeil, John Turner, M.P. Constituency Office, pers. comm.). Chaired by Deputy Prime Minister Eric Neilson, it is known as the Neilson Task Force and has charged study groups with the task of reviewing all government programs. The objective of the committee is to reform and simplify the operations of government and make government more understandable, accessible and sensitive from a citizen's standpoint. Government real estate holdings will also be reviewed and it is expected that the task force will critically review both national parks and CWS holdings. The current political response of the federal government towards land protection is strongly influenced by the financial restraints on the acquisition and management of ecological resources. For the resolution of current land use conflicts in the Canadian Rockies, legislation administered by CWS is dubious as any concerns for birds in the area would be subject to the constraints on funding to purchase needed habitat.

#### 4.1.2 British Columbia Protection Opportunities

Several acts which provide for the reservation of land are excluded from the present review. The Forest Act (R.S.B.C. 1980, c. 140) and the Park (Regional) Act (R.S.B.C. 1979, c. 310) have a very strong orientation towards recreation rather than protection. The Creston Valley Wildlife Act (R.S.B.C. 1979, c. 82) and the Agricultural Land Commission Act (R.S.B.C. 1979, c. 9), do afford some protection for restricted areas and purposes, but they do not provide the kind of rigorous protection which has been argued here to be essential. Sites have not been set aside under the Greenbelt Act (R.S.B.C. 1979, c. 157) or the Environment and Land Use Act (R.S.B.C. 1979, c. 110) for a number of years, and they are not administered by agencies active in habitat or other land protection activities. The Land Act (R.S.B.C. 1979, c. 214) allows for the designation of map reserves, order-in-council reserves and notations of interest for various uses (e.g., ecological reserves, greenbelt reserves, park reserves, wildlife and fish management reserves, etc.) but the reserve status only requires a prospective land user to engage in a process of consultation with the Ministry of Lands, Parks and Housing, which reviews the proposal with the appropriate ancillary agency, before proceeding with development, thus conferring a low level of land protection.

The Ministry of Lands, Parks and Housing (MLP&H) is responsible for the Park Act (R.S.B.C. 1979, c. 309) and the Ecological Reserve Act (R.S.B.C. 1979, c. 101). The latter act is administered by the Ecological Reserves Committee, but management of designated sites rests with the Parks and Outdoor Recreation Division of MLP&H (John Walter, pers. comm.).

The Park Act (section 5) provides for the establishment of parks and recreation areas as well as nature conservancy areas, which may be established within parks or recreation areas "in a natural condition for the preservation of [their] ecological environment and scenic features" (Park Act, section 1). Parks may be of three classes (A, B, or C in descending order of protection) depending on the degree of resource extraction permitted, and of six categories (with category one being the most protected) depending on the purpose of the park. The protection potential is very high, but perusal of the annual "Summary of All Provincial Parks from December 31, 1970 to the present" indicates that changes in the total amount of land held by the ministry have resulted in an approximately constant total (and land area designated as class A parks) since 1975 despite the acquisition of some relatively large areas (e.g., Valhalla Provincial Park). As well, the total area of land designated as nature conservancy areas has remained essentially constant since 1974. The Parks and Outdoor Recreation Division also

suffered a reduction in staff from 99 to 49 staff members in the 1984 provincial staff changes.

The purpose of the Ecological Reserve Act is to reserve crown land; for research, as representative examples, as study areas for response to human modification, for preservation of rare and endangered native plants and animals, and, to protect unique biological and geological examples (Ecological Reserve Act, section 2). It has a strong capability for protecting land, but the Ecological Reserves Committee, which is a very small organization has been involved in a recent organizational shuffle which left the committee without a director for approximately a year. As a result, only two areas were set aside in 1982, none in 1983 and two small (i.e., 7.5 and 17.5 ha) areas in 1984. In addition, the committee must circulate proposals for designation to most other provincial authorities and interest by any other agency results in an immediate veto of that site as an ecological reserve. This has resulted in the large number of very small sites established as ecological reserves. There is a literature (Diamond, 1975) theoretically based in work on island biogeography, that emphasizes the necessity for the protection of large sites in order to maintain the diversity of existing species when surrounding areas are subject to human influence (e.g., forestry, agriculture, urban development, etc.). Simberloff and Abele (1976a and 1976b) denied the conclusions that the



species-area relationships demanded large refuges, but their arguments were strongly countered by Diamond (1976), Terborgh (1976), and Whitcomb, Lynch, Opler and Robbins (1976) who maintained that large refuges offer lower extinction rates and higher immigration rates than small areas, and can preserve entire ecological communities with all trophic levels and the original species mix.

The Ministry of Environment's Fish and Wildlife Branch is responsible for administering the Wildlife Act (R.S.B.C. 1982, c. 57 (Index Ch. 433.1)). Changes which determined the present act now permit land to be held as wildlife management areas (under section 4), critical wildlife areas, or wildlife sanctuaries (section 5), whereas land could not be held under the previous act. In addition, section 11 establishes the Habitat Conservation Fund (HCF) which may be used to acquire land for wildlife management areas. Mr. Williamson (Fish and Wildlife Branch, pers. comm.) indicated that the administration of the HCF is very much in flux and most projects also include money from private bodies such as the Nature Trust and Ducks Unlimited. He also noted that protection of areas critical for fish is usually effective due to the strength of the federal Fisheries Act (S.C. 1970, F-14 C. 199 s. 1). Habitat critical for wildlife does not have the advantage of such strong legislation, thus the Fish and Wildlife Branch tends to get areas that no other agency else wants, so that wildlife sites, regardless of their high value for wildlife habitat, are subject to other uses first.

B.C.'s land protection measures are deemed to be potentially strong, but they are ineffective due to the political processes used to designate sites (i.e., all other uses tend to take precedence over the protection of sites for ecosystem reasons). Also, as with the Parks and Outdoor Recreation Division, staffing is so minimal as to make effective management of protected areas extremely difficult.

#### 4.1.3. Alberta Protection Opportunities

Several acts which provide for the reservation of land are excluded from the present review as a result of contact with resource managers in Alberta that are knowledgeable about the use of the legislation for the protection of land. The Department of Environment Act (R.S.A. 1980, c. D-19) has an emphasis on militias purposes through its responsibilities for hydroelectric reservoirs, irrigation, air and water quality, waste management, etc. The Historical Resources Act (R.S.A. 1980, c. H-8) and the Alberta Environmental Research Trust Act (R.S.A. 1980, c. A-20) are excluded because of their emphasis on historical matters and research respectively. The Forests Act (R.S.A. 1980, c. F-16) and Forest Reserves Act (R.S.A. 1980, c. F-15) concentrate on recreation, industrial or commercial uses of reserves. And finally, the Alberta Heritage Trust Fund is ignored because monies for the protection of land, if monies are used for this purpose, would be administered by existing land

acquisition programs which are already discussed herein elsewhere.

Responsibility for the protection of land is split between the Ministry of Energy and Natural Resources (E&NR), which also administers public land generally, and Alberta Recreation and Parks (AR&Parks). It is important to note that of all the designations listed, only sites specified as wilderness areas exclude the placement of oil or gas wells on protected lands.

Energy and Natural Resources administer the Wildlife Act (R.S.A. 1980, Ch. W-9), which was recently revised through Bill 84 (1984). Through the Wildlife Sanctuaries, Bird Sanctuaries and Wildlife Management Unit Regulations (A.R. 162/74) provided for under the act, wildlife and bird sanctuaries are established, but hunting is the only activity prohibited from those sites. Passage of Bill 84 is expected to result in the transfer of some areas from sanctuary status, wherein only hunting is prohibited, to a more protectionist model for protected areas and the use of easements, leases, etc. (Jim Struthers, Fish and Wildlife Division, E&NR, pers. comm.). Doug Culbert (Fish and Wildlife Division, E&NR, pers. comm.) indicated that the Alberta government budget for land acquisition has remained essentially constant in recent years, so with contributions from Wildlife Habitat Canada, Ducks Unlimited, etc., the rate

of land acquisition has remained high and may even have increased. The Wildlife Act provides for the establishment of a Fish and Wildlife Habitat Fund (section 9: to be called the Fish and Wildlife Trust Fund in section 6 of Bill 84) also known as the "Buck for Wildlife Fund". Traditionally the fund has not been used for land acquisition but opinion varies on its potential use for land acquisition in the future. E&NR also administers the Willmore Wilderness Park Act (R.S.A. 1980, c. W-10) which designates the large (approximately 460,000 ha) Willmore Wilderness Park, which is contiguous with the northern boundary of Banff National Park. Section 6 of the act indicates that,

Nothing in this Act affects the administration and control of mines and minerals within the areas of the Park.

That section seriously reduces the rigorous protection the act otherwise provides.

Alberta Recreation and Parks administers the Provincial Parks Act (R.S.A. 1980, Ch. P-22) in which land may be designated as a park or provincial recreation area under section 7. The sites, which comprise approximately 1% of the land area in Alberta, are not zoned for specific uses and the disposition regulations permit oil and gas wells. Ken Erdman (Head, Lands Use Coordination, AR&Parks, pers. comm.) noted that there was expansion of the Alberta parks system until 1981, but in the last three to five years there has been a marked decrease in the creation of provincial parks. The

Recreation, Parks and Wildlife (RPW) Foundation, which is an independent foundation created May 16, 1976 by an act of the Alberta Legislature, also reports to the AR&Parks ministry. In addition to the problems associated with private foundations described in Section 4.1.4 of the present work, the RPW Foundation grants support recreational activities, development/maintenance of parks, or management/conservation of fish and wildlife, and do not provide for the acquisition of parcels of land (Doug Culbert, pers. comm.).

The Wilderness Areas, Ecological Reserves and Natural Areas Act (R.S.A. 1980, c. W-8) is jointly administered by E&NR and AR&Parks. To date, no Ecological Reserves (or Ecological Areas as they are described in data sent by E&NR) have been established. Of the 95 Natural Areas designated, 45 are of the park type classified as "conservation" as opposed to "recreational" or "educational". Only one Natural Area, however, has been designated in the 1980s (Threepoint Creek, 62 ha in 1985), the remainder were designated in 1979 or earlier, with the vast majority (over two-thirds) designated in 1971. Three Wilderness Areas have been established and they are each relatively large (between 40,000 and 50,000 ha). Their date of establishment has not been provided in data sent by E&NR, but the sites are described in the Act, so must have been established before the statute revision in 1980. Wilderness Area designation provides strong protection, even from oil and gas wells, but appears not to have been used in recent years.

#### 4.1.4. Private Protection Opportunities

A movement to greater private sector involvement in the protection of land, either with or without a relationship with local government agencies (e.g., for management of the site), is seen by some resource managers as the "wave of the future" in land protection (e.g., Stroup and Baden, 1983). As well, recent literature examining options for government agencies include considerable mention of legal mechanisms other than fee simple ownership (e.g., McCallum, 1985). Certainly, private groups with protectionist motives holding title to specific parcels of land offer a strong level of protection to the land. However, the present thesis rejects this mechanism as a valid method for protecting land for the following reasons:

1. the protectionist groups rarely take a complete ecosystem approach, thus generally protecting sites due to their significance for specific species (e.g., Ducks Unlimited concentrates their efforts on the improvement of game bird species);
2. sources of funds for acquiring lands are variable;  
and,
3. private schemes place an undue financial responsibility for protecting the environment on specific individuals and groups, while the responsibility is clearly an important, if neglected, one for the Canadian government.

Thompson notes,

Historically, the English sovereign was a personal owner of all unalienated lands in a third dimensional sense that included all the rights to running water and to air space that could be humanly exercised and controlled. The only difference in modern Canada is that the ownership by the Queen of unalienated property rights is not for personal benefit but for purposes authorized by legislatures. These purposes, stated expressly and impliedly in federal and provincial statutes, do not decree a universal common property or free good. ... Nevertheless, there seems to be an enormous weight of prejudice against the logical and historically correct principle the government-owned natural resources ought to be managed by government like privately-owned property. The basis of this prejudice, fostered by common property theorists, is the belief that publically-owned resources should be free goods and that government's role should be restricted to that of regulator. ... For politicians and civil servants it is likely more comfortable to wear the robes of regulator than those of manager because the regulator can blame someone else for failure whereas the manager has only himself to blame (Thompson, 1981: 16-17).

An example of the federal government placing a high proportion of the responsibility for the protection of land with the private sector came with former Federal Environment Minister Blais-Grenier's proposal to have private sector contributions serve as an important source of funds to buy-out logging rights on South Moresby Island. In a Vancouver Sun article, Kevin McNamee of the National and Provincial Parks Association is quoted as saying,

She's [Blais-Grenier] saying Canadians now have to buy back land that in most cases is already owned by the federal and provincial governments, but was leased to industry for next to nothing.

The article continues,

The environmentalists say their minds have been opened and they have visions of Canadians being asked to fork out millions of dollars every time they want a new park, impoverished environmental groups scrambling to raise the money and a park system that would be beholden to the corporations that contribute money (Vancouver Sun, February 21, 1985, F7).

The following material describes several groups that are involved in private forms of protection. It will provide an illustration of the full range of protection measures available to resource managers. As well, a list of other types of private legal arrangements, which may be used by both private and public agencies to protect specific habitats, and thoughts on the relationship between land protection and indigenous peoples are presented.

The Nature Trust (formerly known as the National Second Century Fund of British Columbia) was established in 1971 to commemorate the beginning of B.C.'s second century as a province. Interest from a trust fund of \$4.5 million is supplemented by gifts of land and money. The money is used to acquire critical wildlife habitats in B.C. for the "preservation of areas, species and objects of significant ecological interest" (Fraser, 1983: 100). Sites are leased to an appropriate federal or provincial agency for management. Alberta does not have any special private land protection organizations, barring the previously mentioned Recreation, Parks and Wildlife Foundation, like the Nature Trust. The management of habitat sites purchased by the



Nature Conservancy of Canada (NCC) may be vested with the relevant federal or provincial government authorities. Funds for land acquisition across Canada by the NCC have been provided by private donors since its beginnings in 1963.

A recent addition to the national land acquisition scene is Wildlife Habitat Canada, an independent foundation begun in 1984, which administers a trust fund of \$3.0 million from a federal government grant, from proceeds from the sale of mandatory habitat conservation stamps to migratory game bird permit holders, and optional sales of prints and stamps by Canadian artist Robert Bateman. In addition to its responsibilities in acting as a watchdog over and catalyst of improvement in wildlife habitat across Canada, Wildlife Habitat Canada has cooperated with private and public organizations in the acquisition of four wildlife habitat areas (i.e., whole ecosystems) in British Columbia and Alberta in its first year of operation.

Ducks Unlimited (Canada) does not purchase land, but since its inception in 1937, it has effectively protected land for waterfowl through long-term management agreements and flooding easements established with existing owners. Funds are obtained from American and Canadian private donors for the habitat enhancement and legal costs incurred. Other legal arrangements of a similarly flexible nature (i.e., other than fee simple ownership), but which may be used by

private or public bodies to protect land include (adapted from van Hees, 1983):

1. life estate - the land is purchased, but the original landowner retains the right to live on the property for the duration of his/her life;
2. purchase and leaseback - the land is purchased, but is subsequently leased out for a specific purpose (usually to offset purchase costs), yet management rights are retained;
3. option to purchase - a legal agreement to sell a property at a predetermined price before a specified date;
4. joint agreement for acquisition and management - sets out the relative roles of the various agreeing parties in a partnership arrangement;
5. leasehold estate - land leased to the tenant becomes the exclusive possession of the tenant for a consideration (i.e., rent);
6. donations of land - may be fee simple, or conditional (i.e., arrangements of conditions attached to the transfer of title);
7. bargain sale - a sale of property for less than the fair market value (often used for situations involving partial sale and partial charitable contribution);
8. easement - a certain right allowed to one person/body over the land of another which is attached to the title of the land and binds subsequent owners;

9. restrictive covenant - a charge on the land title which restricts activity on the land;
10. first right of refusal - a legal caution requiring notice of impending sale and first rights to acquire the property at the then determined selling price;
11. landowner agreement - an agreement to allow specified types of activity, but not attached to the title of the land; and,
12. trade/exchange/transfer - may result in the acquisition of a particular parcel of land in exchange for another property and need not involve the transfer of money.

Private protection lacks some major instruments available to the public sector. For example, van Hees (1983) identifies several mechanisms which are available only to public bodies:

1. zoning;
2. official plans;
3. dedication - whereby a specified proportion of land in a developed area must be retained in a natural state;
4. special designation - gives special recognition to landowners who allow the preservation and management of habitat on their property;
5. transfer of crown lands - between public agencies;
6. crown land reserves - a reserve given to private landholders by the government body responsible for crown land disposition;
7. property tax incentives;

8. income tax incentives;
9. expropriation; and,
10. transfer of title due to nonpayment of taxes.

As McCallum (1985) notes, fee simple ownership should not be the only mechanism used by government agencies for the protection of land. The present author, however, questions the value of methods other than fee simple ownership in accomplishing rigorous protection of whole ecosystems, and contends that non-fee simple methods are more suited to small sites.

#### 4.1.5 Native Protection Opportunities

Native people in Canada have not explicitly made efforts towards the protection of land for ecological purposes in recent times. Native people, however, traditionally set specific areas of land aside for religious purposes and in some cases the reservation lands on which they live serve to accomplish ecosystem protection. Common arguments in land claims negotiations relate to the relationship between native people and the natural environment. Brownrigg (1985: 36) notes that

Given ... the close union of the goals of native people to preserve the environment in perpetuity with the goals of the advocates of protected areas, alliance is a logical step.

Clad (1985: 47) cites Brownrigg as noting that native people stand to gain "legal recognition of ecologically-sound traditional land-use practices, appropriate employment of their traditional lands, and new advocates at the national level" while resource managers stand to gain "an additional constituency, recruiting personnel with profound knowledge of local areas and learning about long-term resource strategies which have proven their adaptability for thousands of years".

Clad notes, however, that

If nothing more than 'life-style patterns' or 'practices' disassociated from living cultures receive conservationist endorsement, the convergence of indigenous peoples' and conservationists' interests will remain at the level of principle only (Clad, 1985: 48).

He also sees native people primarily concerned about the loss of their aboriginal status, while conservationists are concerned primarily with the ecosystem resources of an area. Native people may not see any conflict of interest with commercial development where conservationists would be greatly concerned. Natives may see protected area status as removing something from them due to its perceived externally controlled implementation, while they may not make ecologically sound use of the resources. If common ground to accomplish land protection objectives is to be discovered in concert with native use of areas, it may be desirable to:

1. use the model established in New Zealand (Clad, 1985: 54) wherein park lands were given to the state by the Maori people;

2. choose the form of protection for its compatibility with the purposes of the reserve (per Brownrigg, 1985); and,
3. include native planning and management as an integral part of the proposed protected area (Mishra, 1984; Jeffries, 1984; Nietschmann, 1984; and Dasmann, 1984).

Australia contains three examples of sites where the aboriginal people were granted freehold title to the land only on the condition that it be leased back to the government as a national park. In Kakadu, Uluru and Gurig National Parks, the management of the parks is effected by cooperative management by the relevant government agency and the native land owners: in Uluru National Park at least (no information has been readily available for the other parks), the managing board has a majority of aboriginal people (Marian Genner, pers. comm.).

The issue of the relationship between indigenous people and protected areas was considered important enough to be discussed in numerous papers at the World Congress on National Parks held in Bali, Indonesia, 11 - 22 October, 1982 (e.g., Child, 1984; Saharia, 1984; Mishra, 1984; Fox, 1984; Neitschmann, 1984; Jeffries, 1984; Sakurai, 1984; Dasmann, 1984; etc.). Despite the international interest, it is unlikely that cooperative efforts between natives and conservationists will succeed at protecting land in Canada until the land claims negotiations are settled.

#### 4.2 International Mechanisms for Protection

The present section outlines the range of international ecological conventions and programs of which the World Heritage program is a part, and broadly compares them to the World Heritage program. It emphasizes examination of schemes that offer long-term protection of natural ecosystems supporting a wide variety of species through international means. International methods of land protection offer an alternative to domestic forms of land protection that may reduce some of the concerns regarding the changeable policies of government bodies, that is, once a site is designated it would not be internationally politically expedient for a government agency to remove it from that designation. As well, Canada, like other nations integrated at the global level, dares not risk international opprobrium for its influence on trade and other key aspects of international relations. A detailed description of the World Heritage Convention and its manifestation in Canada will be reserved for the next chapter.

Canada is party to numerous international conventions pertaining to biological and environmental issues ranging from fisheries and migratory birds to endangered species and pollution. A partial list of international environmental treaties to which Canada is signatory is presented in Table II (Chapter 1). Of the conventions listed, only the convention for the protection of migratory birds in the

United States and Canada (the Migratory Birds Convention), the convention on wetlands of international importance especially as waterfowl habitat (the Ramsar Convention), and the convention concerning the protection of the world cultural and natural heritage (the World Heritage Convention) provide for the protection of sites of land. With the Migratory Birds Convention, Canadian supporting legislation in the Migratory Birds Convention Act, enables the designation of sites as Migratory Bird Sanctuaries. Site designation or removal from designation is thus made a Canadian responsibility, unconnected to the international community. As well, the Migratory Birds Convention and the Ramsar Convention place their emphasis on the protection of migratory birds, waterfowl, and their habitat. In effect some whole ecosystems are protected, but sometimes management of the areas so designated is so specifically beneficial to the bird species that it is detrimental to other non-bird species. The present work concentrates on the international protection of a variety of complete ecosystems, not just specific groups such as migratory birds or waterfowl, thus the Ramsar and Migratory Bird conventions can be excluded from detailed consideration. The World Heritage Convention allows for the protection of whole ecosystems and the sites are subject to international scrutiny on the basis of the natural attributes of the site over time.



Two international programs with which the World Heritage Convention is often compared are the International Biological Programme (IBP) and the Unesco Man and the Biosphere (MAB) Programme. In each of the three programs, whole ecosystems are set aside through the reservation of the land base, but the purpose and criteria for the selection of sites for reservation vary greatly between the programs.

Worthington (1975) writes that following the successful International Geophysical Year (1957-1958) and the International Polar Years (1882-1883 and 1932-1933), biologists were encouraged to think about the advantages of international cooperation. From 1959 to 1964, Sir Rudolph Peters, President of the International Council for Scientific Unions (ICSU), and G. Montalenti and C.H. Waddington of the International Union of Biological Sciences, worked to develop the International Biological Programme (IBP). Early contacts were made with the International Union for Conservation of Nature and Natural Resources (IUCN) which had been launched shortly after World War II by Sir Julian Huxley in his capacity as first Director-General of Unesco. The IUCN supported the perpetuation of wild nature and natural resources for cultural/scientific and long-term economic/social welfare reasons (Franson, 1975: 9). Although it did not initiate the IBP, the IUCN helped facilitate the ICSU's work in creating the IBP, and the Unesco General Assembly which established the IBP was held in Paris in July

of 1964. What was to be an eight year program became a ten year program (1964-1974) to study "The Biological Basis of Productivity and Human Welfare...[through]... Basic studies related to biological productivity and human welfare, which were calculated to benefit from international collaboration, and were urgent because of the rapid rate of the changes taking place in all environments throughout the world" (Worthington, 1975: 18). Fifty-eight countries established national committees and an additional 32 countries participated informally (CCIBP, 1971).

The IBP was broken into seven sections, of which Conservation Terrestrial (CT) was the section that examined land protection issues and recommended the creation of "ecological reserves" (entitled "ecological" to emphasize the type of science most likely to be practised and "reserves" so that the land was seen to be set aside in a non-static way)(Cameron and Billingsly, 1975: 132). E. M. Nicholson, head of the CT section, never felt that the CT section was fully endorsed by the rest of the biological community (Worthington, 1975), but the results of the IBP-CT were in some cases quite notable, especially in British Columbia where the Ecological Reserves Act (1971) and the Ecological Reserves Committee grew out of the IBP. The IBP did not legally "designate" ecological reserves, but examined areas for protection and studied methods for protection. As Worthington (1975: 33) writes,

As a result of IBP the extent and effectiveness of protection afforded to ecosystems, species and sites of outstanding scientific interest will be increased. The CT section is not directly concerned with the measures that this process requires, but with providing the scientific basis on which implementation in the form of enforcement, administration and legislation, must depend.

The IBP selection of "recognized and proposed reserves was governed by the following criteria:

- (a) the areas should, taken together, contain adequate and manageable samples of the entire range of major ecological formation or ecosystems in the world and illustrate the degree of variation within each;
- (b) the series should include sites which, although they do not qualify for inclusion under the first criterion, support species of plants and animals of outstanding interest or great rarity;
- (c) the series should include sites which are of scientific interest because of the human management to which they have been subjected, even if this has in some cases led to more or less far-reaching modification of the biota;
- (d) the series should include sites which are important because they have been the scene of detailed and well-documented research...(Nicholson, 1968: 17).

The procedure by which sites were to be identified for consideration included:

compiling a worldwide inventory list (check sheets) of habitats, based on their interest to biology and conservation; a review of the representation of these habitats in currently protected natural areas throughout the world, showing the location, area protected, and degree of protection; and a review of habitats that are unprotected, or insufficiently protected and within which additional projects for suitable protection need to be developed, to ensure that representative samples are conserved. (Cameron and Billingsley, 1975: 137-138).

Subsequent to this procedure, the participating state was made responsible for enacting appropriate legislation. In western Canada both British Columbia, through the Ecological Reserves Act (1971), and Alberta, under a variety of different acts (Franson, 1975:20) were enabled to create ecological reserves.

The termination of the IBP in 1974 meant that if the intent of the IBP was to be continued in Canada, domestic legislation to accomplish that objective was necessary. As a result the influence of the international community was removed from this program and it became in some areas (e.g., B.C. under the Ecological Reserves Act) a domestic responsibility. As such, the IBP was, but is not currently, an international process for encouraging land protection by states. By comparison, World Heritage Site designation is an ongoing international tool of protection and designates sites, rather than just promotional, as IBP was.

Unlike the IBP which was an independent program of set duration, the Man and the Biosphere (MAB) program was initiated in 1970 by the General Conference of Unesco to focus on the relationship between man and the biosphere in a continuous manner. Areas designated under MAB are entitled "biosphere reserves" and may include private or public lands that may or may not be previously protected. As Taschereau (1982: 11-12) notes,

Like Ecological Reserves, Biosphere Reserves function to conserve genetic resources. The emphasis, however, is on active use of the reserves for monitoring and research, education and training. Representative ecosystems are preferred to those which are rare or unique. This facilitates the extrapolation of research results to broadly comparable sites in other parts of the world. The international exchange of information is a vital part of the MAB programme. Manipulative as well as non-manipulative research takes place in Biosphere Reserves as a means of investigating the effects of human interference upon ecosystems and the recovery of degraded ecosystems. This use of a reserve is in sharp contrast to that of an Ecological Reserve where human influence is kept to a minimum and only non-manipulative research is permitted. Ideally, however, the Biosphere Reserve contains one or more core ecosystems which are left undisturbed and serve as a reference against which to assess the effects of human use.

The biosphere reserves include one or more of the following three categories of land (from Canada/MAB, 1975: 4 and Canada/MAB, 1977: 4):

1. Natural areas of representative Canadian biogeographical provinces - defined as those sites having a minimum of human disturbance, e.g., transition zones, unique features, and/or local places of exceptional scientific interest such as a south facing slope north of tree line with a specialized biotic community.
2. Harmonious landscape - defined as nationally important examples of ecosystems in which landscapes are in harmonious balance with long established patterns of land-use. These sites have resulted from human activities and are dependent upon them for their perpetuation. Within this category it is therefore important that the activities contributing to the

development of the harmonious landscape continue and that activities which tend to disrupt the harmonious landscape be restricted. Examples include some Quebec and Prince Edward Island rural landscapes.

3. Degraded ecosystems - defined as nationally important examples of ecosystems degraded by the activities of man, with an accompanying loss of productivity. The purposes of designation of such sites would be monitoring and rehabilitation. Examples of areas ranging in severity from slight modification to extreme degradation include:

- (a) representative prairie lands subjected to slowly increasing salinization brought about by cultivation; and
- (b) representative areas near heavy industry where denudation of vegetation has been partial or complete.

As well, areas set aside at the commencement of new major engineering projects could act as benchmarks to measure the impact of the project. Attempts are made to ensure that,

Each biosphere reserve is made up of a protected 'core' of undisturbed landscape together with nearby areas showing some of the ways in which once similar landscapes are being managed to meet human needs (Francis, 1982: 1).

By 1982, 700 projects and 150 biosphere reserves had been established in 40 countries (Taschereau, 1982: 13). In Canada the MAB program began in 1972, and to 1983 two sites had been designated as biosphere reserves. Because the MAB program followed so closely on the heels of the IBP program,

the Canadian government felt the IBP-CT work was enough and it provided no special money for MAB. For the past two years, the UNESCO-MAB Secretariat for Canada has been inactive and serving merely as a holding operation (Taschereau, 1982: 13).

The continuing lack of Canadian interest in MAB reduces its viability as an ongoing protection mechanism for natural areas. It may be argued that part of the lack of continuing interest in MAB arose because the MAB program was not assigned to a particular responsible agency at its inception, likely due to its proximity in time to the extensive IBP program. As well, the MAB program keeps its focus limited to research and natural areas are included primarily for their relationship to areas subject to human impact. Designation of sites is effected regardless of the previous protection status of the sites. Representative sites imply comparison between areas rather than the recognition of inherent site values. In contrast, the World Heritage Convention arose independently and at an opportune time, its administration was assigned to a specific government agency, and it maintains a broad focus, including genetic banking, research/education, protection of endangered species, etc. Natural areas are the target of the World Heritage Site designations: the natural areas are recognized for their intrinsic value and must be assured of protection by the participating state before they are included on the World Heritage List.

From the preceding review of federal, provincial, private and other international conventions and programs, the World Heritage Convention stands out in having the following features:

1. ongoing;
2. subject to international scrutiny;
3. concerned with many types of natural ecosystems (e.g., not just individual species);
4. concerned about ecosystems for a wide variety of reasons (e.g., not just for research);
5. capable of designating legally recognizable sites of land (as opposed to promotion of designation); and,
6. recognizing a site's intrinsic values over its relative values in comparison with other sites.

The above allow the World Heritage program to provide for the long-term protection of natural ecosystems supporting a wide variety of species through international means.

#### 4.3 Summary and Conclusions

The variety of methods for land protection is staggering as the present review indicates, however, the application of the methods at the local level is fraught with problems. Budgets for land protection management have been severely restricted within the Canadian Wildlife Service and the B.C. government. The political attitude towards the establishment



of National Parks is variable, even when the site meets the criteria to balance the national representation of areas. Other land uses such as oil and gas wells in Alberta and most extractive uses in British Columbia have veto power over provincial protection legislation. Private protection measures are subject to variable funding and often do not take a whole ecosystem approach. Native people are not likely to contribute to land protection until their land claims are settled.

International land protection mechanisms, although often not considered in review and evaluations of protection mechanisms (e.g., van Hees, 1983), are characterized as overcoming some of the problems of Canadian protection measures and their recent application (e.g., the changeability of policy due to political whim). The Ramsar and Migratory Bird Conventions are too specifically oriented to birds, the IBP encouraged land protection, but it is over, and MAB is inadequately administered in Canada, emphasizes research and does not ensure protection.

The next chapter describes the attributes of the World Heritage Convention that make it a theoretically valuable legal mechanism for protection land. Subsequent chapters will evaluate the theoretical aspects of the convention in relation to real situations and its use in the Canadian Rockies.

## CHAPTER 5: THE WORLD HERITAGE CONVENTION AND ITS APPLICATION IN CANADA

### 5.0 Introduction

The previous chapter briefly noted some of the advantages of the World Heritage Convention when compared with domestic and other international forms of land protection. The present chapter describes in greater detail the features of the World Heritage Convention and its potential for accomplishing the land protection goals established in Chapter 2. Many resource managers, when selecting a mechanism for protecting land, have been restricted by the legislation available to the agency they are employed by, or in cases where various options were reviewed, they have rated the World Heritage Convention as conferring a low level of protection (e.g., Fraser, 1983) or even as unworthy of consideration (e.g., van Hees, 1983). The present thesis proposes to analyze the validity of the negative evaluations for the protection of land in Canada.

The potential effectiveness of any land protection approach, such as the World Heritage Convention, is best tested in its response to threats to the integrity of the land protected under it. In later chapters, the World Heritage Convention's impact, both proven and predicted, will be examined in the context of several cases. The present

chapter initially describes the historical development of the World Heritage Convention (Section 5.1). Second, the features of the convention (e.g., the process, the components, and the purpose) as well as the application process are presented (Section 5.2). Third, the procedure used by Canadian officials to nominate sites pursuant to the convention is described (Section 5.3). Finally, the features of the convention that are related to the ongoing, rigorous protection of whole ecosystems are summarized for easy reference (Section 5.4).

### 5.1 The Development of the World Heritage Convention

How did the World Heritage Convention come to be as it now exists? As explained to the present author by Robert Garvey (Executive Director, U.S. Advisory Council for Historic Preservation), in the early 1960s the Unesco International Monuments Committee recognized that many universally important sites were endangered and wanted to develop a system to protect endangered monuments. At the same time they recognized the need for a professional organization to assist with the monuments, resulting in the establishment of the International Council on Monuments and Sites (ICOMOS), an independent organization of professionals, in 1965.

Numerous international campaigns to protect cultural areas (e.g., as a result of floods in Florence, rising water in Venice, the potential effects of the Aswan Dam on the Nubian monuments, etc.) had been launched, but they met with variable responses by other nations. The Director-General of Unesco wanted to coordinate efforts within the Unesco framework. The U.S. argued that the efforts should be made by a truly international body which was independent of Unesco. As a result of the U.S. arguments, an international meeting of experts was held in Paris in 1969. The experts studied various systems to help endangered cultural places. A system of private foundations similar to that used in the U.S. was rejected by the U.S. as inappropriate for the needs of the group. The U.S. strongly encouraged a more comprehensive view of sites that included the setting of the building, rather than the usual focus on the building alone. Considerable debate centred around whether a recommendation which offers relatively weak protection, or a convention which offers relatively strong protection should be proposed. The discussion led to the draft convention for the "International Protection of Monuments, Groups and Buildings and Sites of Universal Value" (Slatyer 1984: 5) which was then sent for review by many nations.

At the same time, the scientific wings of Unesco were actively involved in the Man and Biosphere Programme and were not interested in developing a new system of protected

areas. However, in the U.S., a Whit House Conference on International Cooperation held in 1965 called for

. . . a trust for the world heritage that would be responsible to the world community for the stimulation of international cooperation efforts to identify, establish, develop and manage the world's important natural and scenic areas and historic sites for the present and future benefit of the international citizenry (Slatyer, 1984: 5).

The idea of a world heritage trust was actively promoted by Russell E. Train and Lee Talbot, both of whom were in key positions in the U.S. Council of Environmental Quality. Their active lobbying led to Nixon's 1971 Presidential statement calling for the establishment of a world heritage trust. Talbot was also taking initiatives to set up a world heritage trust to be administered by the IUCN. This led to the IUCN preparing a draft "Convention for the Conservation of the World's Heritage" (Slatyer, 1984: 5) which was aimed at natural heritage, but ignored cultural heritage. The convention was to be presented at the 1972 Stockholm Conference on the Environment.

At a September, 1971 meeting to draft a preparatory U.S. paper for the Stockholm Conference, Hiroshi Daifuki of the U.S., representing Unesco, presented the Unesco proposals with respect to the cultural convention. Robert Garvey, who was aware of the environmental issues because of sharing an office with the Director of the National Parks Service, urged the environmental groups to present a reorganized Unesco cultural convention to the Stockholm Conference. The major

reason behind it was the feeling that it would be difficult to get both the draft conventions entitled "International Protection of Monuments, Groups and Buildings and Sites of Universal Value" and the "Convention for the Conservation of the World's Heritage" ratified and that they would be unwieldy to manage if kept separate. The participants were not convinced. Later, the Stockholm Conference was not able to resolve conflicts regarding the methods for putting teeth in the proposed convention, so nothing on World Heritage came out of that meeting.

At the April, 1972 intergovernmental meeting in Paris (under the broad auspices of Unesco) to examine the nations responses to the draft cultural convention which had been proposed in 1969, the U.S. proposed a major amendment that would result in the development of a new document that would include natural as well as cultural elements. The participating nations were caught unprepared to discuss natural heritage, so representatives of organizations dealing with natural heritage were quickly sought. After a week of determining whether the U.S. proposal could be considered, it was accepted and the next two weeks were spent drafting the new convention. The International Convention Concerning the Protection of the World Cultural and Natural Heritage (known commonly as the World Heritage Convention) was adopted by the General Conference of Unesco in Paris on the 16th of November, 1972.

Canada played an integral role in the development of the convention by sending Peter Bennett (former head of the National Historic Parks and Sites Branch) and other representatives to the Paris meeting. ICOMOS and Unesco staff fully supported the cultural aspects and the IUCN supported the natural aspects.

Little discussion prior to the adoption dealt with the substantive details of the convention, however there was a good deal of discussion on the issue of voluntary versus compulsory contributions to the World Heritage Fund. As resolved, nations could opt for either scheme and this has resulted in some problems (Peter Bennett, pers. comm.): some "voluntary" countries have not accepted the "gentleman's agreement" that voluntary contributions must total at least 1% of total Unesco contributions (i.e., a sum greater than or equal to that under compulsory contributions).

Upon receipt by Unesco in 1975 of the documents of ratification from the twenty states, the World Heritage Convention became enforceable. Many states have become party to the convention, and it is considered a popular convention by many nations (Peter Bennett, pers. comm.). Table III lists the states party to the convention and the date of joining the convention as of December, 1985.

TABLE III: LIST OF STATES PARTY TO WORLD HERITAGE CONVENTION AND  
THE DATE OF JOINING THE CONVENTION AS OF DECEMBER, 1985

<u>States</u>	<u>Ratification Date</u>
United States of America	7 December, 1973
Egypt	7 February, 1974
Iraq	5 March, 1974
Bulgaria	7 March, 1974
Sudan	6 June, 1974
Algeria	24 June, 1974
Australia	22 August, 1974
Zaire	23 September, 1974
Nigeria	23 October, 1974
Niger	23 December, 1974
Iran (Islamic Republic of)	26 February, 1975
Tunisia	10 March, 1975
Jordan	5 May, 1975
Yugoslavia	26 May, 1975
Ecuador	16 June, 1975
France	27 June, 1975
Ghana	4 July, 1975
Syria (Arab Republic of)	13 August, 1975
Cyprus	14 August, 1975
Switzerland	17 September, 1975
Morocco	28 October, 1975
Senegal	13 February, 1976
Poland	29 June, 1976
Pakistan	23 July, 1976
Canada	23 July, 1976
Germany (Federal Republic of)	23 August, 1976
Bolivia	4 October, 1976
Mali	5 April, 1977
Norway	12 May, 1977
Guyana	20 June, 1977
Ethiopia	6 July, 1977
Tanzania (United Republic of)	2 August, 1977
Costa Rica	23 August, 1977
Brazil	1 September, 1977
India	14 November, 1977
Panama	3 March, 1978
Nepal	20 June, 1978
Italy	23 June, 1978
Saudi Arabia	7 August, 1978
Argentina	23 August, 1978
Libyan Arab Jamahiriya	13 October, 1978
Monaco	7 November, 1978
Malta	14 November, 1978
Guatemala	16 January, 1979
Guinea	18 March, 1979
Afghanistan	20 March, 1979
Honduras	8 June, 1979



Denmark	25 July, 1979
Nicaragua	17 December, 1979
Haiti	18 January, 1980
Chile	20 February, 1980
Seychelles	9 April, 1980
Sri Lanka	6 June, 1980
Portugal	30 September, 1980
Yemen (Democratic Republic of)	7 October, 1980
Central African Republic	22 December, 1980
Ivory Coast	9 January, 1981
Mauritania	2 March, 1981
Cuba	24 March, 1981
Greece	17 July, 1981
Oman	6 October, 1981
Malawi	5 January, 1982
Peru	24 February, 1982
Spain	4 May, 1982
Burundi	19 May, 1982
Benin	14 June, 1982
Zimbabwe	16 August, 1982
Holy See	7 October, 1982
Mozambique	27 November, 1982
Cameroon (United Republic of)	7 December, 1982
Lebanon	3 February, 1983
Turkey	16 March, 1983
Colombia	24 May, 1983
Jamaica	14 June, 1983
Madagascar	19 July, 1983
Bangladesh	3 August, 1983
Luxembourg	28 September, 1983
Antigua et Barbuda	1 November, 1983
Yemen (Arab Republic of)	25 January, 1984
Mexico	23 February, 1984
Zambia	4 June, 1984
United Kingdom	29 June, 1984
Qatar	12 September, 1984
New Zealand	22 November, 1984
Sweden	21 January, 1985
Dominican Republic	12 February, 1985
Hungary	15 July, 1985
Phillipines	19 September, 1985
China	12 December, 1985

## 5.2 The Features of the World Heritage Convention

A system for rigorously protecting natural areas must include a process of designation, including clear criteria and evaluation procedures, a means of implementing and enforcing compliance with the purpose of the system, and a coordination and management structure. This section examines these and related elements of participation in the World Heritage Convention. It delineates which agencies are involved in implementing the convention and what functions they perform. It itemizes which criteria and evaluation procedures are used to select sites for inclusion on the World Heritage List and/or for support by the World Heritage Fund. Monitoring procedures for sites once they are established as World Heritage Sites are reviewed. The accountability of each nation and the criteria used to delist sites from the World Heritage List are also examined.

Nations wishing to join the World Heritage Convention may either ratify, accept or accede to the convention through the appropriate national agency/agencies (more than one agency may be involved where cultural and natural heritage are administered separately, but in Canada, Parks Canada is responsible for both forms of heritage). Definitions of ratification, acceptance, and accession were produced by Parks Canada staff for their own clarification and are included as Appendix 2. Each nation, through becoming a signatory to the Convention, makes these commitments:

1. holding in trust for the rest of mankind those parts of the World Heritage that are found within its boundaries;
  2. supporting other nations in discharging this trust;
  3. exercising the same responsibility to works of nature as to works of humankind; and,
  4. granting to its cosignatories the right to observe the degree to which it meets its obligations under the convention.
- (principles adapted by the present author from Unesco, 1980).

Member states are obliged to support the creation of World Heritage Sites on their own territory with appropriate legal, administrative, scientific, technical and financial provisions where possible, and keep the public informed about their activities. As Hales (1984: 745) notes, signatories additionally

recognize an affirmative obligation to help in the identification and preservation of heritage situated outside of their own territory, and specifically agree 'not to take any deliberate measures which might damage directly or indirectly the cultural and natural heritage situated on the territory of other States Parties to this Convention.

It must be emphasized that the responsibility for the protection status for areas nominated as World Heritage Sites rests with each state and is not provided by designation as a World Heritage Site. World Heritage designation on a site provides only additional international recognition of the site's universal value. Failure to provide adequate protection in a reasonable time period may be just cause for removing a site from World Heritage status. There is no

limit to the total number of World Heritage Sites which any nation may establish.

There are six identifiable agencies that participate in the management of the World Heritage Convention. They include the World Heritage Committee, the World Heritage Bureau, the World Heritage Secretariat, and three advisory bodies, the IUCN, the ICOMOS, and the ICCROM, identified more fully below. The World Heritage Committee consists of representatives of 21 of the states party to the Convention (this was increased from 15 representatives upon the ratification of 40 states) from different regions and cultures of the world. Each national representative serves a term of 6 years, but the terms are staggered so that only one third of the representatives leaves every two years. The World Heritage Committee is appointed by the General Conference of Unesco, and is assisted in its site selection activities by three independent, professional organizations, the International Council on Monuments and Sites (ICOMOS), the International Centre for the Study of the Preservation and the Restoration of Cultural Property in Rome (ICCROM), and the International Union for Conservation of Nature and Natural Resources (IUCN) (through its appointed Commission on National Parks and Protected Areas (CNPPA)). The first two organizations help evaluate cultural property nominations while the latter organization does the same for natural property nominations.

The World Heritage Committee is ultimately responsible for administering the World Heritage Convention. As such it is responsible for three major tasks, these are:

1. establishing the World Heritage List, comprising the list of sites designated under the World Heritage Convention;
2. establishing the List of World Heritage in Danger, comprising endangered sites which are on the World Heritage List, or which are suitable for inclusion, but are still in the process of being designated as World Heritage Sites; and,
3. administering the World Heritage Fund, which provides international assistance to sites on the World Heritage List(s), or sites suitable for inclusion, for the purpose of studies, provision of experts, staff training, equipment supply, low-interest loans, or (rarely) subsidies.

The World Heritage Committee is administratively supported by its Secretariat, which consists of two part-time people appointed by the Director-General of Unesco, and their secretaries. The support provided by such a small number of staff does not permit active publicity and/or recruiting of nations by the World Heritage Committee regarding their involvement in the World Heritage Convention.

The World Heritage Bureau, does the initial review of site nominations and prepares preliminary recommendations for the World Heritage Committee. The Bureau consists of 6 representatives from within the World Heritage Committee, 4-5 Unesco staff, 1 IUCN representative, and 2-3 ICOMOS representatives. Bureau recommendations are usually, although not always, accepted by the Committee as a whole thus the Bureau has a powerful role in the site selection process. Table IV lists the 1986 Committee members.

The process used for designating sites under the World Heritage Convention comprises several steps which are conducted over an annual cycle of events. With the assistance of the World Heritage Committee, member states identify natural and cultural sites suitable for inclusion on the World Heritage List or the List of World Heritage in Danger. Sites suitable for inclusion in the World Heritage List as "natural heritage" have at least one of the following features:

- natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view;
- geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation; [or,]
- natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty (World Heritage Convention, Article 2).

TABLE IV: LIST OF 1986 WORLD HERITAGE COMMITTEE MEMBER STATES

Executive

Chairman, 1986: Mr. Amini Aza Mturi, Tanzania

Rapporteur: Mr. A.T. Davidson, Canada

Vice Chairmen: Algeria, Bulgaria, India, Mexico, Norway

List of all 1986 Committee member states:

Algeria	Lebanon
Australia	Libyan Arab Jamahirivah
Brazil	Malawi
Bulgaria	Mexico
Canada	Norway
Cyprus	Sri Lanka
Germany	Tanzania
Greece	Turkey
Guinea	Yemen
India	Zaire
Jordan	

Nominations to the lists are drawn up by the member state. The Secretariat registers and reviews the nominations for completeness and authenticity, then distributes them to the appropriate international organization (IUCN for natural sites) for review and technical evaluation against the criteria in the "Operational Guidelines for the Implementation of the World Heritage Convention (Unesco Intergovernmental Committee for the Protection of the World Cultural and Natural Heritage, 1984), which are included in Appendix 3.

Natural sites are evaluated by the IUCN. James Thorsell, current Executive Officer of the IUCN's Commission on National Parks and Protected Areas, prepares an annual report to the World Heritage Bureau which contains evaluations of the year's nominated sites (James Thorsell, pers. comm.). He makes use of administrative and technical assistance from the IUCN Secretariat and technical advice from a worldwide network of members and counsellors. Thorsell mentioned that recent efforts within the IUCN have attempted to make site evaluation more empirical using a defined rating scheme with quantified results. He recognizes the problems associated with rating schemes for relatively unquantifiable data, and will thus give the scheme a relatively small role in evaluating sites.



The World Heritage Bureau examines the nominations and the technical evaluations and drafts recommendations to the Committee. It was James Thorsell's impression (pers. comm.) that the IUCN evaluations are trusted and usually accepted without question, indicating the IUCN's power in the nomination process. The relative lack, to date, of representatives on both the Bureau and the Committee with training in the natural sciences has also led to this general acceptance of IUCN recommendations. Following the Bureau meeting, the Secretariat distributes summaries of nominations and Bureau recommendations to all member states. Any additional information requested by the Bureau is sought by the Secretariat from the state and transmitted to the Committee members, IUCN, ICOMOS, and ICCROM. At the Committee meeting all nominations are reviewed, but the nominations are already classified as either

1. recommended by the Bureau for inclusion on the World Heritage List,
2. definitely not recommended for the List, or
3. with problems of the application of the criteria.

From the nominations presented, some may be accepted for inclusion on the List, some may be rejected, and some may be sent back to the member state for further background work, legislation to better ensure protection, etc. The decisions of the Committee and the new World Heritage List are subsequently published and circulated to all member states.

In emergency situations, the annual procedure is bypassed for sites which,

would unquestionably meet the criteria for inclusion in the World Heritage List and which have suffered damage from disaster caused by natural events or by human activities (Unesco Intergovernmental Committee for the Protection of the World Cultural and Natural Heritage, 1984: 17).

In those cases the nomination is processed as received, and emergency assistance may be forthcoming if requested by the state concerned. Table V contains the World Heritage List current to December, 1985.

Along with the previously mentioned activities, the Committee provides technical assistance for safeguarding World Heritage Sites through administering the World Heritage Fund. In accordance with their choice at ratification, member states make either compulsory or voluntary financial contributions (equivalent to 1% or more of their donation to Unesco) to the World Heritage Fund. Additional private or corporate donations are combined with state monies to supply needy countries with,

1. preparatory assistance in evaluating and inventorying sites proposed for inclusion in the List,
2. technical cooperation through the provision of experts and technicians or equipment for particular conservation projects,
3. emergency assistance "for work in connection with cultural and natural properties included or suitable for inclusion in the World Heritage List and which are in immediate danger of deterioration or total destruction", and/or,
4. training of specialized personnel through study courses held either locally or abroad (adapted from Unesco, 1982: 8-10).

TABLE V: THE WORLD HERITAGE LIST (current to December, 1985)

Algeria	Al Qal'a of Beni Hammad Tassili n'Ajjer The M'Zab Valley Djemila Tipasa Timgad
Argentina	Los Glaciares National Park Jesuit Missions of the Gauranis (joint nomination with Sao Miguel das Missoes, Brazil, as an international site) Iguazu National Park
Australia	Kakadu National Park The Great Barrier Reef Willandra Lakes Region Western Tasmania Wilderness National Parks Lord Howe Island Group
Bangladesh	The historic mosque city of Bagerhat Ruins of the Buddhist Vihara at Paharpur
Benin	Royal palaces of Abomev
Brazil	Historic town of Ouro Preto Historic centre of Olinda Sao Miguel das Missoes (joint nomination with the Jesuit Missions of the Guaranis, Argentina, as an international site) Historic centre of Salvador de Bahia Sanctuary of Bom Jesus do Congonhas
Bulgaria	Boyana Church Madara Rider Thracian tomb of Kazanlak Rock-hewn churches of Ivanovo The Ancient City of Nessebar Srebarna Reserve Pirin Rila Monastery Thracian tomb of Svetchari
Canada	Nahanni National Park L'Anse aux Meadows National Historic Park Dinosaur Provincial Park Kluane National Park (joint nomination with Wrangell-St. Elias National Monument, U.S., as an international site) Canadian Rocky Mountain Parks (includes The Burgess Shale Fossil Site, Yoho National Park)

	Anthony Island Provincial Park Head-Smashed-In Buffalo Jump Wood Buffalo National Park Quebec (Historic area)
Columbia Cartagena	Port, Fortresses and Group of Monuments,
Costa Rica	Talamanca Range - La Amistad
Cuba	Old Havana and its fortifications
Cyprus	Paphos Painted churches in the Troodos region
Ecuador	Galapagos Island Old city of Quito Sangay National Park
Egypt	Abu Mena Memphis and its Necropolis - the pyramid fields from Giza to Dahshur Ancient Thebes with its Necropolis The Nubian monuments from Abu Simbel to Philae Islamic Cairo
Ethiopia	Simien National Park Rock-hewn churches of Lalibela Fasil Ghebbi, Gondar Region Lower valley of the Omo Lower valley of the Awash Tiya Aksum
France	Mont St. Michel and its bay Chartres cathedral Palace and park of Versailles Vezelay, church and hill Decorated grottoes of the Vezere valley Palace and park of Fontainebleau Chateau and estate of Chambord Amiens cathedral The Roman Theatre and its surroundings and the "Triumphal Arch" of Orange Roman and romanesque monuments of Arles Cistercian abbey of Fontenay Royal saltworks of Arc and Senans Place Stanislas, Place de la Carriere and Place d'Alliance, Nancy Church of Saint-Savin-sur-Gartempe Cape Girolata, Cape Porto and Scandola Nature Reserve (Corsica) Pont du Gard (Roman aqueduct)
Germany	Aachen cathedral

(Federal Republic of)	Speyer cathedral Wurzburg residence with the court gardens and residence square The Pilgrimage Church of Wies The Castles of Augustsburg and Falkenlust at Bruhl St. Mary's Cathedral and St. Michael's Church at Hildesheim
Ghana	Forts and castles of Volta, Accra and western and central regions Ashante traditional buildings
Guatemala	Tikal National Park Antigua Guatemala Archaeological Park and ruins of Quirigua
Guinea	Nimba Strict Nature Reserve (jointly with the part of Nimba situated in Ivory Coast)
Haiti	National History Park-Citadel "San Souci", Ramiers
Holy See	Vatican City
Honduras	Maya site of Copan Rio Platano Biosphere Reserve
India	Ajanta Caves Ellora Caves Agra Fort Taj Mahal The Sun Temple, Konarak Group of Monuments at Mahabalipuram Kaziranga National Park Manas Wildlife Sanctuary Keoladeo National Park
Iran	Tchogha Zanbil Persepolis Meidan-e Shah Isfahan
Iraq	Hatra
Italy	Rock drawings in Valcamonica The historic centre of Rome The church and Dominican convent of Santa Maria della Grazie with the "Last Supper" by Leonardo da Vinci Historic centre of Florence
Ivory Coast	Tai National Park Comoe National Park
Jordan	Petra

	Qusair Amra
Lebanon	Anjar Baalbek Byblos Tyr
Libyan Arab Jamahiriyah	Archaeological site of Leptis Magna Archaeological site of Sabratha Archaeological site of Cyrene Rock-art sites of Tadrart Acacus
Malawi	Lake Malawi National Park
Malta	Hal Saflieni Hypogeum City of Valetta Ggantija Temples
Morocco	The Medina of Fez The Medina of Marrakesh
Nepal	Sagarmatha National Park Kathmandu valley Royal Chitwan National Park
Norway	Urnes Stave church Bryggen Roros Rock drawings of Alta
Pakistan	Archaeological ruins at Mohenjodaro Taxila Buddhist ruins at Takht-i-Bahi and neighbouring city remains at Sahr-i-Bahlol Thatta, historical monuments Fort and Shalimar gardens at Lahore
Panama	The fortifications on the Caribbean side of Panama: Portobelo-San Lorenzo Darien National Park
Peru	City of Cuzco Santuario historico do Machu Picchu Chavin (Archaeological site) Huascarán National Park
Poland	Wieliczka salt mine Historic centre of Cracow Auschwitz concentration camp Bialowieza National Park Historic centre of Warsaw
Portugal	Central Zone of the Town of Angra do Heroísmo (Azores)

	The monastery of the Hieronymites and the Tower of Belem (Lisbon)
	The monastery of Batalha
	The convent of Christ (Tomar)
Senegal	Island of Goree
	Djoudj National Bird Sanctuary
	Niokolo-Koba National Park
Seychelles	Aldabra Atoll
	Vallee de Mai Nature Reserve
Spain	The Mosque of Cordoba
	The Alhambra and the Generalife, Granada
	The Burgos Cathedral
	Monastery and site of the Escorial, Madrid
	Parque Guell, Palacio Guell and Casa Mila, in Barcelona
	Altamira Cave
	Old town of Segovia and its aqueduct
	Churches of the Kingdom of the Asturias
	Santiago do Compostela (Old town)
	Old town of Avila with its extra-muros churches
Sri Lanka	Sacred city of Anuradhapura
	Ancient city of Polonnaruwa
	Ancient city of Sigiriya
Switzerland	The convent of St. Gall
	The Benedictine Convent of St. John at Mustair
	The Old City of Berne
Syrian Arab Republic	Ancient city of Damascus
	Ancient city of Bosra
	Site of Palmyra
Tanzania (United Republic of)	Ngorongoro conservation area
	Ruins of Kilwa Kisiwani and ruins of Songa Mnara
	Serengeti National Park
	Selous Game Reserve
Tunisia	Medina of Tunis
	Archaeological site of Carthage
	Amphitheatre of El Jem
	Ichkeul National Park
	Punic town of Kerkouane
Turkey	Historic areas of Istanbul
	Goreme National Park and the rock sites of Cappadocia
	Great Mosque and Hospital of Divrigi
United States of America	Yellowstone National Park
	Mesa Verde National Park
	Grand Canyon National Park

Everglades National Park  
 Independence Hall  
 Wrangell-St. Elias National Monument (joint  
 nomination with Kluane National Park,  
 Canada, as an international site)  
 Redwood National Park  
 Mammoth Cave National Park  
 Olympic National Park  
 Cahokia Mounds State Historic Site  
 Great Smoky Mountains National Park  
 La Fortaleza and San Juan Historic Site (Puerto  
 Rico)  
 The Statue of Liberty  
 Yosemite National Park

Yemen  
 (People's  
 Democratic  
 Republic of)

Old walled city of Shibam

Yugoslavia

Ohrid region  
 Kotor region  
 Old city of Dubrovnik  
 Stari Ras and Sopocani  
 Historical complex of Split with the palace of  
 Diocletian  
 Plitvice Lakes National Park  
 Durmitor National Park

Zaire

Virunga National Park  
 Garamba National Park  
 Kahuzi-Biega National Park  
 Salonga National Park

Zimbabwe

Mana Pools National Park, Sapi and Chewore  
 Safari Areas

The following inscription was made at the  
 proposal of the Hashemite Kingdom of Jordan:  
 The old city of Jerusalem and its walls.



The World Heritage Committee's activities are summarized in Table VI.

It must be remembered that in order to designate and protect sites under the World Heritage Convention, the onus is on the individual states involved. The maintenance of the sovereignty of each state party to the convention is noted explicitly in the convention, but international accountability is also implied:

Whilst fully respecting the sovereignty of the States on whose territory the cultural and natural heritage ... is situated, and without prejudice to property rights provided by national legislation, the States Parties to this Convention recognize that such heritage constitutes a world heritage for whose protection it is the duty of the international community as a whole to co-operate (World Heritage Convention, Article 6(1)).

The convention does not provide for a formal evaluation and monitoring procedure for sites on the World Heritage List. Sites may only be placed on the List of World Heritage in Danger (Table VII) at the request of the state on whose territory the site is located. Peter Bennett (pers. comm.) noted that at the time the convention was being drafted, monitoring was not discussed in depth as it was (and is still) too politically sensitive an issue. It was discussed at the 1983 meeting of the World Heritage Committee, but

the Committee preferred not to establish a formal reporting system at the present time and rather encouraged IUCN, ICOMOS and ICCROM to collect information through their experts. The Committee will continue to seek information from States Parties on an ad hoc basis whenever this is

TABLE VI: ROLES AND RESPONSIBILITIES OF THE WORLD HERITAGE COMMITTEE

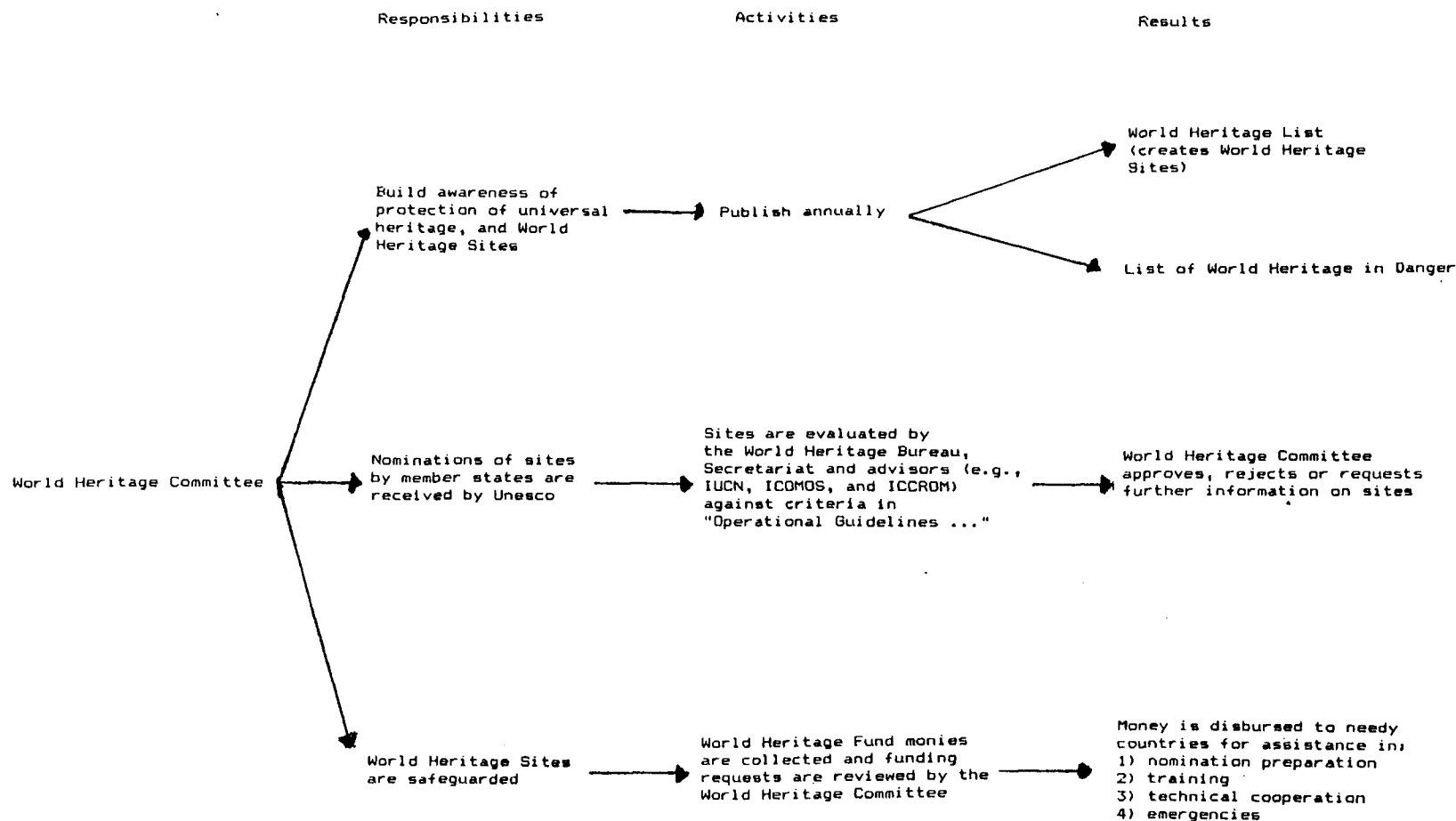


TABLE VII: LIST OF WORLD HERITAGE IN DANGER (to December, 1985)

<u>Contracting State having submitted the nomination of the property in accordance with the Convention</u>	<u>Name of Property</u>	<u>Date of inscription</u>
Hashemite Kingdom of Jordan	Old City of Jerusalem and its Walls	17 December, 1982 (Paris, 6th session of the Committee)
Senegal	Djoudj National Bird Sanctuary	2 November, 1984 (Buenos-Aires, 8th session of the Committee)
Tanzania (United Republic of)	Ngorongoro Conser- vation Area	2 November, 1984 (Buenos-Aires, 8th session of the Committee)
Yugoslavia	Natural and Cul- turo-Historical Region of Kotor	26 October, 1979 (Luxor, 3rd session of the Committee)
Zaire	Garamba National Park	2 November, 1984 (Buenos-Aires, 8th session of the Committee)

Natural properties identified for possible inclusion in the List of World Heritage in Danger at the December, 1985 meeting of the World Heritage Committee include:

Tai National Park, Ivory Coast

Ichkeul National Park, Tunisia

necessary for making its decisions (Unesco World Heritage Committee, Report of the Rapporteur, Seventh Ordinary Session, Florence (Italy) 5-9 December, 1983: 15).

The majority of those interviewed mentioned that all United Nations agencies have to be careful not to be seen to interfere in domestic activities and thereby threaten the state's sense of sovereignty. Non-governmental organizations (e.g., the IUCN) were not considered for monitoring, notes Bennett, as they are seen to be semigovernmental in nature due to their contracts with Unesco (e.g., the IUCN is contracted by Unesco to provide the technical reviews of site nominations, James Thorsell, pers. comm.). In essence, however, the worldwide network of specialists regularly contacted by the IUCN serve to informally monitor World Heritage Sites.

Any process such as the World Heritage Convention process lacks teeth unless there is a way of ensuring the quality of sites protected under it. The major tool the world community can wield to ensure that World Heritage Sites are preserved for future generations is the "Procedure for the eventual deletion of properties from the World Heritage List" provided in the Operational Guidelines (Unesco Intergovernmental Committee for the Protection of the World Cultural and Natural Heritage, 1984), and included as Appendix 4. The procedure is intended for a property that "has deteriorated to the extent that it has lost those characteristics which

determined its inclusion in the World Heritage List", or where needed corrective measures agreed to by the state at the time of inclusion on the list have not been accomplished in the time proposed. The administrative procedure for deleting sites is relatively complex. The Secretariat fields concerns by the state involved (which is the only body that can appropriately request a review) or other sources, attempts to verify the information through consultations with IUCN, ICOMOS, or ICCROM, and passes on any comments to the annual meeting of the Bureau. The Bureau examines the situation in detail and recommends actions to the Committee. The state party is informed of the Bureau recommendation and may also send comments to the annual meeting of the Committee for its consideration. The Committee decides whether the site is to be

1. retained on the list, but given a reasonable time limit for restoration action,
2. deleted from the World Heritage List, or,
3. subject to further study as to its condition and the potential for restoration.

"The Committee was particularly concerned that all possible measures should be taken to prevent the deletion of any property from the List" (Unesco Intergovernmental Committee for the Protection of the World Cultural and Natural Heritage, 1984: 11). To date no sites have been delisted, but several sites on the List of World Heritage in Danger are close to being deleted because developments adjacent to the

sites are seriously threatening the sites. This is raising a difficult dilemma for the Committee because deletion of a site was seen by all persons interviewed as a very serious action with heavy political implications for the state involved, yet to maintain the integrity and quality of sites protected under the Convention, some sites may have to be deleted (Jane Robertson, pers. comm.).

In summarizing the key features of the World Heritage Convention's procedures, criteria and enforcement the following aspects are critical:

1. Responsibility for protection status on sites nominated as World Heritage Sites rests with the nominating state, although international accountability is also implied.
2. The World Heritage Committee is ultimately responsible for administering the Convention, but considerable decision making power rests with the World Heritage Bureau and the IUCN for natural sites. The World Heritage Committee Secretariat consists of a small staff and thus is unable to actively recruit new nations to join the convention.
3. Criteria from the "Operational Guidelines for the Implementation of the World Heritage Convention" are used in an annual cycle of events to designate sites on the World Heritage List and List of World Heritage in Danger, and for funding by the World Heritage Fund.

4. No formal monitoring process is in place, but informal monitoring is conducted by the IUCN.

5. The major tool of opprobrium for sites which are seriously deteriorated is the "Procedure for the eventual deletion of properties from the World Heritage List." To date, no sites have been delisted, partly due to the political ramifications of such an act. Preference is given to improvement of the site using monies from the World Heritage Fund.

### 5.3 The Canadian Nomination Procedure and Relationship to the World Heritage Convention.

Canada became party to the World Heritage Convention on the 23rd of July, 1976. Peter Bennett was the primary instigator of Canadian participation in the convention after attending the Paris drafting meeting. In accordance with Article 34(b) of the World Heritage Convention, it was necessary for the federal government to inform the provincial governments of the recommendation to become party to the convention. Then minister of Indian and Northern Affairs (which administered Parks Canada), Jean Chretien, was supportive of the convention and wrote to the provincial and territorial governments for their approval. All provinces and both territories approved. A problem arose with Quebec as they did not wish to participate in the process of

nomination through Parks Canada, wanting instead to nominate sites directly (Peter Bennett, pers. comm.). That was impossible as the convention is signed with the nation. The problem with Quebec seems to be somewhat rectified as exemplified by the recent nomination of the walls of Quebec City as a World Heritage Site.

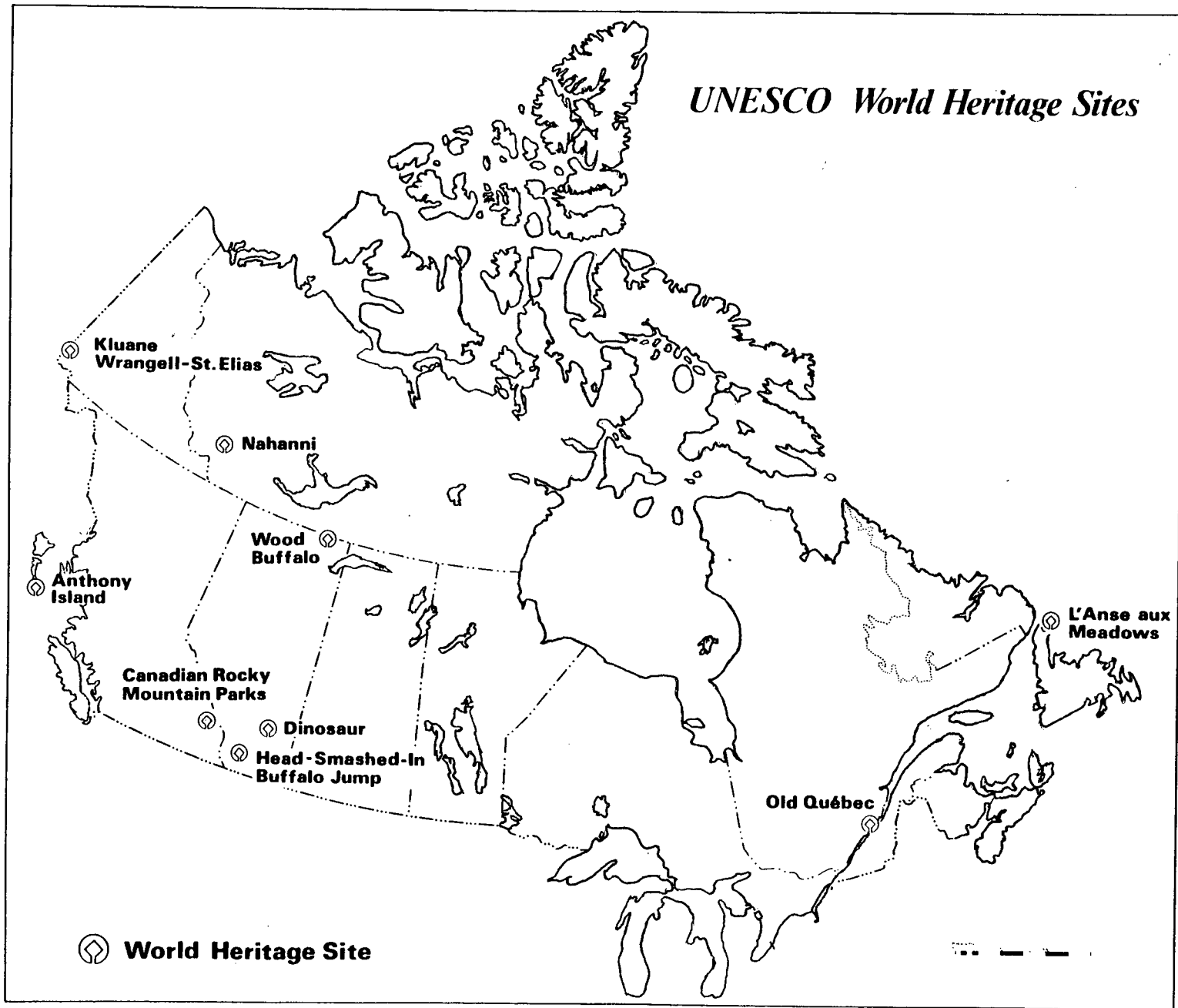
Within a nation party to the convention, nominations of World Heritage Sites may originate from any qualified person, but the site must meet World Heritage criteria. "Applications are prepared by those owning the land, usually provincial or federal governments" (Jean Brown, pers. comm., April 4, 1985). Although private and native groups are eligible to nominate sites, they have not done so to date. Nominations must be transmitted to Unesco through the Canadian federal government as signatory to the convention. Within the federal government, Environment Canada, in which Parks Canada has responsibility for both natural and cultural conservation, implements the convention on behalf of Canada. Any necessary liaison with the provinces, the U.S., or the Canadian Commission for Unesco is provided by the Program Policy Group of Parks Canada under the aegis of Harold Eidsvik, the current Senior Policy Advisor (Jean Brown, pers. comm.).



The preparation of the nomination depends to a large extent on the provision of expert advice to the site's land owner to ensure that the site truly meets the strict criteria of the convention, and is compared to other sites on a global level. On provincial lands, once the nomination is complete, it must be approved by the appropriate provincial minister. All applications are then reviewed by the federal minister of the Environment. When approved, the application is sent through the Department of External Affairs to Unesco headquarters in Paris where it is passed on to the World Heritage Committee Secretariat for the procedure outline previously. An example of the Canadian procedure for World Heritage Site designation will emerge in the discussion of the Canadian Rocky Mountain Parks World Heritage Site.

Canada has had nine World Heritage Site nominations accepted to date (excluding the Burgess Shales World Heritage Site which is now included as part of the Canadian Rocky Mountain Parks World Heritage Site). They are listed in Table V's complete World Heritage List and their locations are identified in Figure 2. The tenth site, the historic walls of Quebec City, was delayed a year for consideration in order to allow ICOMOS to redevelop their criteria for "historic cities and towns" (Jean Brown, pers. comm.). Of the ten sites designated, four are cultural and six are natural which constitutes a relatively reasonable balance when compared with other countries (as a whole, the emphasis

FIGURE 2: THE CANADIAN WORLD HERITAGE SITES



has been strongly weighted towards the nomination and designation of cultural sites). The combined administration of both types of resources under one agency is an important factor in the balance. Provincial sites (e.g., Dinosaur Provincial Park) as well as national sites have been designated under the convention. Additional sites are being investigated for nomination, although no current nominations are being formally processed.

Canada has played an important role in the World Heritage Convention and its administration. Her leading role in the original drafting of the convention in 1972 resulted in election to the original Committee for two years beginning in 1976, however, Canada had not had a seat since 1978 until her election in December of 1985 (Jean Brown, pers. comm.). "The \$76,000 (Cdn.) contribution to the World Heritage Fund is compulsory and represents 1% of Canada's contribution to Unesco. The exact amount fluctuates with the exchange rates and in 1984/85 was actually \$67,064 (Cdn.)" (Jean Brown, pers. comm., April 4, 1985). The contribution ensures Canada's continued participation in the World Heritage Convention.

Canadian personnel have filled numerous important international positions related to the World Heritage Convention. Some examples include,

-- Harold Eidsvik, Senior Policy Advisor with Parks Canada is the current Chairman of the IUCN Commission on National Parks and Protected Areas (CNPPA) and spent 3 years as the Executive Officer of the CNPPA.

-- James Thorsell, formerly of the University of Calgary, is now the Executive Officer of the CNPPA.

-- Peter Bennett, former Director of the National Historic Parks and Sites Branch, helped draft the World Heritage Convention from that position.

-- Richard Bill, of Parks Canada's Planning Division spent 2-3 years seconded to the Unesco Division of Ecological Sciences.

-- David Munro, formerly of the Canadian Wildlife Service was the Director-General of IUCN at one time.

-- Francois Leblanc of Historic Sites, Quebec Region, Parks Canada, spent 2-3 years as Chief Executive Officer of ICOMOS.

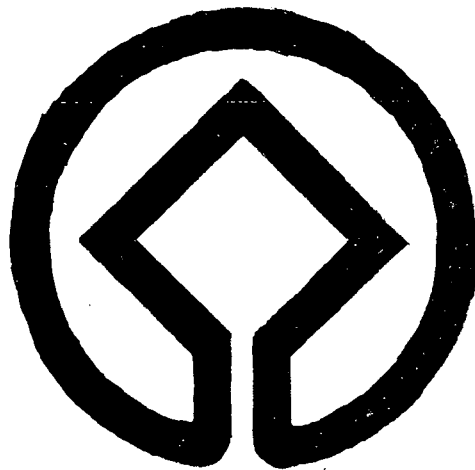
-- Richard Herring of the National Museums Corporation went to the IUCN Finance and Administration Committee.

Canada even assisted in the choice of the World Heritage Emblem, which is illustrated in Figure 3: it is the only country to date which has copyrighted the emblem.

#### 5.4 So, What is the Potential of the World Heritage Convention?

Several points regarding the nature and implementation of the World Heritage Convention indicate its potential for long-term protection of ecosystems. The convention applies to legally recognizable "areas of outstanding universal value" when evaluated from a worldwide perspective. It serves to protect whole ecosystems for a wide variety of reasons. Sovereignty over the land listed in the World Heritage List is retained by the state, and responsibility for legislative and administrative provisions for protection of each site also rests with the state party to the convention. Nominations of possible sites for the World Heritage List or the List of World Heritage in Danger are initiated by the states but are selected through an ongoing annual process by the World Heritage Committee in consultation with the World Heritage Bureau, and with the assistance of the World Heritage Secretariat and the non-governmental organizations, IUCN, ICOMOS, and ICCROM.

FIGURE 3: WORLD HERITAGE EMBLEM



Prepared by Mr. Michel Olyff of Belgium (Slatyer, 1984),

The World Heritage Emblem symbolizes the interdependence of cultural and natural properties: the central square is a form created by man and the circle represents nature, the two being intimately linked. The emblem is round, like the world, but at the same time it is a symbol of protection (Unesco, 1978)(taken from Unesco, 1982).

The world community maintains informal scrutiny over the management of the sites, and delisting is a possible form of international opprobrium with strong political pressures. As long as a site's integrity remains, sites protected under the World Heritage designation are not subject to political expediency regarding their continued inclusion on the World Heritage List. Financial assistance to ensure the provision of equitable conservation opportunities throughout the world are provided by the World Heritage Fund, and can serve to provide important assistance to developing nations in particular (James Thorsell, pers. comm.).

The performance of the World Heritage Convention as compared with the potential identified in this chapter will be examined in Chapter 6 for sites (primarily one site in Australia) where World Heritage status made a difference in how the land was managed. The potential of the World Heritage Convention is evaluated in Chapter 7 in relation to the resource management concerns for the Canadian Rockies and protection conferred by the Canadian Rocky Mountain Parks World Heritage Site.

## CHAPTER 6: CASES WHERE WORLD HERITAGE DESIGNATION MADE A DIFFERENCE

### 6.0 Introduction

The true test of the potential of the World Heritage Convention described in Chapter 5 is its ability to influence decision making. Critical testing occurs when sites are threatened by demands for the use of the land which would result in degradation of the natural values for which the site was designated in the first place. The purpose of the present chapter is to review situations throughout the world in which sites protected under the World Heritage Convention have been under the threat of damaging resource extraction. No examination is made of resource use which does not fundamentally damage the value of the site. For example, non-motorized recreation or subsistence uses of some World Heritage Sites by the area's indigenous peoples may not endanger the values of the site, (e.g., Saragmatha National Park, Ngorongoro National Park, Nahanni National Park, Kluane National Park-Wrangell/St. Elias National Reserve, etc. (see Ambio 12(3-4). 1983)). In the next chapter the experiences internationally are taken into consideration. Adding information gained from written material and personal interviews, an assessment is made of the applicability of the World Heritage Convention to land use conflicts in the Canadian Rockies and to special Canadian sites.



Very little information is available regarding cases other than the Australian situation where designation of a site under the World Heritage Convention made a difference. A brief interoffice memorandum from the Director of the UN Information Centre in Belgrade dated 11 July, 1985 indicated that following concern in 1984 about the possible destruction of the Tara River Canyon by the construction of a hydroelectric dam, a Tanjug News Agency Report dated 4 July, 1985 indicated that the dam would not be constructed. The report also notes that,

the announcement of the power station project started an extensive public polemic in Yugoslavia on whether economic usefulness should be the only criterion, and Unesco experts and the Yugoslav public came out in favour of preserving the canyon and the national park (Tanjug News Report 4 July, 1985 Belgrade pp. 1-2).

No additional information is provided on the nature and strength of the "public polemic" described above, but it may be expected that the World Heritage Site status figured prominently in the debate.

Additional sites known to be involved in resource use conflicts wherein World Heritage Site status is expected to figure significantly in the resolution of the conflict include:

1. an area outside Durmitor National Park (Yugoslavia) containing an overflowing lead processing plant waste disposal pond (James Thorsell, pers. comm.);

2. the Doudji area of the Senegal, which is being considered for a hydroelectric dam (James Thorsell, pers. comm.);
3. the Ichkeul National Park in Tunisia, threatened by resource uses (James Thorsell, pers. comm.); and,
4. the tropical rain forests of New South Wales, Australia being proposed for World Heritage status in 1985 (James Thorsell, pers. comm.).

Due to the similarity of Canada's parliamentary government and federal/provincial responsibilities to Australia's government and federal/state responsibilities, as well as the approximately equivalent level of raw wilderness and industrial development, and sparsely populated land bases, the Tasmanian dam case may be considered particularly relevant to the Canadian situation. As well, Australia and Canada share a common British Common Law heritage. It must be remembered that land use conflicts on sites designated as World Heritage Sites must be resolved within the state signatory to the convention (see Chapter 5 herein). In some cases the degradation of sites has resulted in the state requesting that they be placed on the List of World Heritage in Danger, however, concerns about maintaining national sovereignty have made it impossible for other nations to interfere in domestic affairs because the request to place a site on the List of World Heritage in Danger must come from the state in which the site is located. Financial assistance

from the World Heritage Fund has been used as a way to encourage site improvement. The influence of the World Heritage Convention must be levied, therefore, through the seriousness of the response of the state to its international obligation when becoming signatory to the World Heritage Convention. Various people interviewed considered Australia and Canada as both having a strong commitment to the World Heritage Convention. Thus the Australian case could be considered to be informative and suggestive of how Canada might react in a similar situation.

#### 6.1 The Tasmanian Dam Case

The Tasmanian dam case is a documented situation in which designation of an area as a World Heritage Site made a difference in a conflict where,

resource development interests want[ed] to explore and exploit the region ... [while] ... conservationists ... believe[d] that it should be preserved intact (Bosworth, 1982: 268).

It involves an area of south west Tasmania of 1,435,000 ha which is managed under the equivalent of IUCN Category VIII Multiple Use Management Area. IUCN Category VIII protects only wildlife and allows economic development. Of this area, 644,000 ha are strongly protected under the equivalent of Categories II and IV National Parks, Nature Reserves and Historic Sites (Bosworth, 1982). Initiation of a dam project on the Gordon and Franklin Rivers which would include parts

of the strongly protected portion created the source of conflict in the case.

The area has both biological and archaeological value: it contains at least two thirds of the 32 mammal species known in Tasmania, of which 2 are rare and endangered; it supports 159 bird species of which 2 are rare and endangered; it is of "major scientific value both because it is undisturbed, and because it contains a diverse terrestrial and freshwater invertebrate fauna of great importance to world biogeography" (Bosworth, 1982: 269); and, it contains "eleven prehistoric sites now known in the wild rivers areas of the South West, confirming it as one of the most important archaeological regions in Australia" (Bosworth, 1982, 270). Development in the area has been recent: save a brief mineral exploration period at the turn of the century, the development of the Upper Gordon hydroelectric scheme and the resulting ancillary development only began in the 1960s and 1970s (Bosworth, 1982).

Nature conservation and recreation are the most extensive land uses at present, followed by forestry activities, water power developments, and mineral exploration and extraction (Bosworth, 1982: 270-271).

Development of the proposed electric power project on the Gordon and Franklin Rivers was anticipated to result in several significant losses: 24 rare species of plants; one, of two, meteorite craters in Australia; many important cave and karst features; habitat for 2 endangered species of birds

and 1 mammal; native freshwater fish from upstream catchments. The project would also result in the isolation of the area (i.e., by providing access). Not only the local Australians saw the area as valuable:

the South West wilderness has been recognized by the IUCN as one of the world's three largest temperate wilderness areas, and therefore an area of world scientific and conservation significance. It has also been recognized by UNESCO's International Biological Programme (Project Aqua) as a unique wilderness of incomparable significance and value (Bosworth, 1982: 268).

Australia, at the request of the state of Tasmania, had nominated the Western Tasmanian Wilderness National Parks, including the Gordon-Franklin area, as a World Heritage Site and it had been listed (Lane, 1983: 555).

A problem arose when,

[f]or the purpose of generating electricity at low cost in order to stimulate economic development and increase employment, Tasmania authorized the construction of a dam on the Gordon River in southwestern Tasmania ... to be built by the Hydro-Electric Commission of Tasmania ... (Commonwealth v. State of Tasmania, et. al., 1983: 625).

It was the beginning of a political battle that would engender a great deal of public discussion and involvement. At the time the Tasmanian government was headed by Premier Robin Gray of the Liberal Party which is considered the party for those of conservative philosophy in Australia. Malcolm Fraser, the Prime Minister of Australia at the time, was also from the Liberal Party. Fraser became aware of the

increasingly strong political movement against the construction of the dam and was aware of the Commonwealth's (i.e., the Australian term for the federal level of government) power to stop the dam because of the site's designation under the World Heritage Convention (which had to have been signed with the Commonwealth government), but he was unwilling to pursue the necessary legal action due to the Liberal philosophy on state rights (Kelly, 1984), and due to the political ties with Gray's government.

The political group opposed to the dam consisted of a wide variety of individuals from every walk of life, but primarily people in their mid to late twenties with an environmental bent (The Wilderness Society, 1983). The protesters began their activities in August of 1981, but the most public actions were conducted during the closing months of 1982 and the early months of 1983. The chief spokesperson for "The Blockaders" or "Greenies", as they were known, was Bob Brown, an active environmental crusader. Not only were those people who protested at the dam site locations involved in the protest, but many people actively marched and demonstrated in other parts of Australia. The protest definitely raised the public awareness of the World Heritage Convention in Australia.

Late 1982 and early 1983 also saw the closing months of the Fraser government's terms of office. In describing the political scene at the time, Kelly writes,

Fraser announced on 19 January [1983] his \$500 million thermal power station offer to Tasmania as an alternative to the Gordon-below-Franklin dam. Given the 'states rights' parameters accepted by the Prime Minister, this was an excellent tactical move. Fraser was hoping to transform the focus of the dam debate from the environment to federalism. The offer was intended to demonstrate his bona fides; certainly it was generous. The \$500 million was the biggest grant ever offered by any federal government to Tasmania for a single project and one of the largest offers for a project anywhere in Australia (Kelly, 1984: 360).

The \$500 million offer was one of several large programs offered or initiated that summer in the prelude to the federal election. Gray rejected the offer, but,

the offer was designed to show Fraser's concern; it was hoped Gray's rejection would leave Tasmania, not Fraser, with the political backlash. The offer was now meant to prove to Tasmania that the Fraser Government would not override Tasmania's decision and it was thereby intended to confirm that state's support for Fraser in the forthcoming federal election (Kelly, 1984: 360).

At the same time, the Australian Labour Party was undergoing an internal revolt which saw the replacement of Bill Hayden by Bob Hawke as their Prime Ministerial candidate. They settled on Hawke as leader just 24 hours before the election was called, but the change gave them a political edge which they maintained for the whole election campaign (Kelly, 1984). The Labour Party campaigned strongly against the construction of the Gordon-below-Franklin dam, and the situation became a major issue in the election campaign.

According to a prominent Australian official who wishes to remain anonymous, the Gordon-below-Franklin dam situation was one of the first issues dealt with by the Hawke government after their majority win in the March 5, 1983 federal election. The newly passed World Heritage Properties Conservation Act (1983) along with the National Parks and Wildlife Conservation Act (1975) and regulations thereunder provided the necessary prohibitions which were used in the High Court of Australia case of the Commonwealth against the State of Tasmania. As the report of the case states,

the Commonwealth purported to stop the Gordon below Franklin Scheme in order to protect the natural and cultural heritage of the area, by prohibiting the construction of the dam, and certain associated activities, without the consent of the relevant Commonwealth Minister (Commonwealth v. State of Tasmania, et. al., 1983: 625).

The case was decided in favour of the Commonwealth by seven judges by a vote of 4 to 3.

Arguments in the legal case centred around the validity of the Commonwealth's legislation and regulations in relation to Tasmania's state sovereignty. The Commonwealth had the power under the World Heritage Properties Conservation Act to prohibit clearing, excavation and building activities in relation to property submitted for inclusion in the World Heritage List, but it had to demonstrate its jurisdiction over the state with regard to this issue, because, like Canada's provinces, sovereignty over most land use in Australia rests with the state.



The critical issues on which the case was decided were the powers of the federal government in terms of corporate and external affairs. The corporate powers provided for in the constitution state that "the Commonwealth may regulate [corporations] activities, in so far as they are 'for the purposes of' trade" (Wilcox, 1983: 34). Wilcox goes on to note that this gives the Commonwealth government a wide scope for environmental control. The corporate regulations are, however, totally unrelated to World Heritage Site designation. The external affairs powers related to the fact that by being party to the World Heritage Convention,

this international obligation constituted an 'external affair' so that the Commonwealth Parliament could pass legislation to implement within Australia the obligation (Wilcox, 1983: 33).

Wilcox also notes that,

the significance of the dam case, in constitutional terms is that this difference was resolved by clear-cut statements by the majority to the effect that the question whether a given matter is of international concern, so that a convention upon that subject matter may be an 'external affair' must be determined by the judgement of the (Commonwealth) Executive and Parliament (Wilcox, 1983: 33).

Thus, Australia could stop the Gordon-upon-Franklin dam. The Hawke government did stop the dam, but some compensation was paid to Tasmania, the amount of which has not, as yet, been fully determined according to an Australian official.

Australian officials deemed that the court case was of sufficient importance and possible interest to other nations party to the World Heritage Convention that it produced a brief report on the case and made it available to the Eighth Ordinary Session of the World Heritage Committee which met in Buenos Aires (Argentina) in late 1984. The report concludes:

The decision of the Australian High Court is very significant for two reasons. First, the decision constitutes the first test of the application of the World Heritage Convention in a court of law. Secondly, most of the judges were of the clear view that each Party to the Convention has an obligation to do all it can to protect sites on the World Heritage List which are situated within its own national boundaries. Although decisions of the High Court of Australia are not, of course, binding on other countries, it is certain that the Tasmanian Dam case and judgement will be of considerable importance and relevance as and when other Parties to the Convention encounter a similar problem (Unesco, World Heritage Committee, Eighth Ordinary Session, 1984: Item 10).

## 6.2 Conclusions To Be Drawn From the Australian Case

Examination of the Tasmanian dam case can lead to identification of the key issues surrounding the use of the World Heritage Convention as a tool for land protection. It also can draw attention to components necessary for active protection of sites, and potential opposition to that protection which may be encountered. Due to the similarities between the Australian and Canadian Parliamentary and legal systems, the Australian lessons would be well heeded by Canadian land protection planner.

The Tasmanian dam case raises five important issues:

1. the importance of advocates and activists in initially raising the issue to a high political stature and in increasing general public awareness;
2. the necessity for a strong, well organized environmental constituency at the Commonwealth level to carry the argument through the political/legal channels;
3. the importance of the nature of commonwealth/state relations, including the breakdown of constitutional authorities over land;
4. the importance of legislation supporting the commonwealth government's external affairs power; and,
5. the willingness of the commonwealth government to ensure compliance with the World Heritage Convention's intent, including the willingness to spend money to comply.

The fifth point raises the issue of the use of Commonwealth external affairs authority to overpower state paramountcy in land management. It also relates to the seriousness with which Australia accepts her international obligations as signatory to the World Heritage Convention. Clearly these issues also raise important questions for Canada in her role as signatory to the World Heritage Convention.

When the issues raised by the Tasmanian case are compared with Canada's relations between the federal and provincial governments with respect to land protection, several points

arise. The role of advocates/activists and the environmental constituency in government is likely to be similar to the Australian situation. Federal/provincial responsibilities for land are similar. Legislation to support the federal government's external affairs responsibilities under the World Heritage Convention has not been established, although World Heritage Sites on provincial crown land are nominated only with the agreement of the relevant provincial government.

The willingness of the federal government to ensure compliance with the World Heritage Convention under stress has not been tested in Canada. In general, according to several people interviewed by the author, Canada is seen to be serious about her international obligations, especially in establishing World Heritage Sites. It is difficult, however, to anticipate Canada's willingness to spend money to comply on existing sites with World Heritage status.

Potential opposition to the protection of World Heritage Sites may arise in Canada as a result of the lack of supporting legislation and an unwillingness to support the sites financially. As well, the provincial governments are likely to be concerned about the use of federal paramountcy over provincial lands. Clearly, active protection of World Heritage Sites will require consideration of these factors.

One concern that arises from the Tasmanian case, but which is not one of the key issues of the case, is that the problem arose from a single, large threat. The question is raised, how would both Australia and Canada respond to slow, incremental damage of a World Heritage Site? It is difficult to anticipate either nation's reaction to that type of site degradation. It is a particularly critical concern for the Canadian Rocky Mountain Parks World Heritage Site with regard to damage from tourism development. The same issue of incremental damage is arising in many undeveloped nations.

The next chapter examines the establishment of the Canadian Rocky Mountain Parks World Heritage Site and evaluates the efficacy of the World Heritage Convention in relation to Canadian domestic protection measures using the criteria developed in Chapter 2. It also offers some recommended actions to improve Canada's implementation of the World Heritage Convention.

CHAPTER 7: THE ESTABLISHMENT OF THE CANADIAN ROCKY MOUNTAIN  
PARKS WORLD HERITAGE SITE AND AN EVALUATION OF THE  
IMPLICATIONS OF WORLD HERITAGE SITE CREATION FOR  
CANADA AND OTHER NATIONS

7.0 Introduction

Planners concerned with the rigorous protection of undeveloped land have, as has been described in Chapter 4, a wide array of potential protection mechanisms at their disposal. Although Banff, Jasper, Kootenay and Yoho National Parks are designated under the National Parks Act, it has been argued in Chapter 3 that although the protection offered by the legislation is strong, the parks are still subject to many actions which threaten this unique biome. Parks Canada planners have gone to the trouble of pursuing World Heritage designation for the four national parks of the Rockies region. Why they bothered to have the area designated under the World Heritage Convention and what the gains are likely to be, in terms of ensuring rigorous protection, is the focus of this final chapter. As these questions are addressed, the more general issue of the efficacy of the World Heritage Convention to any participating nation will be confronted.

The present chapter describes the establishment of the Canadian Rocky Mountain Parks World Heritage Site in Section 7.1. In Section 7.2, an evaluation of the World Heritage

Convention's conformity with the criteria established in Section 2.2 in comparison with domestic protection methods is presented in relation to the Canadian Rocky Mountain Parks World Heritage Site. The evaluation addresses why Parks Canada staff bothered with establishing the area as a World Heritage Site when the land is already protected under the National Parks Act. Broad conclusions are drawn concerning the World Heritage Convention's strengths and weaknesses in accomplishing the goal of rigorous protection in the Rockies and in Canada generally.

The application of the World Heritage Convention at the worldwide scale, in Section 7.3, extends the implications of the present work and provides some possible reasons behind the advantages and disadvantages of the Convention outlined in Section 7.2. As well, the implications of the Convention for resource protection planners are discussed in concluding the section.

### 7.1 The Establishment of the Canadian Rocky Mountain Parks World Heritage Site

As Chapter 3 indicated, while the Canadian Rockies are considered to be adequately protected, they are still subject to threats for which existing legislation and land use policy may be insufficient to ensure rigorous protection. Even the

national parks, through the Four Mountain Parks Planning Process, are threatened with increased tourism facility development.

Establishment of a World Heritage Site in the Canadian Rockies was discussed as early as 1973/74 (Harold Eidsvik, pers. comm.) when the area was included as part of an initial indicative inventory of prospective World Heritage Sites. Proposals were made at first for a joint Canada-U.S. site representing the Rocky Mountain complex. The Americans were pushing to propose the Waterton-Glacier International Peace Park, but the Canadians felt that Waterton did not represent the finest features of the Rockies, and wanted Banff National Park designated first (Harold Eidsvik, pers. comm.). At the March 15-16, 1983 meeting of the Canada-U.S. Joint Advisory Committee on National Parks, Parks Canada briefing notes indicate that their representatives were "convinced that the complexity of the natural systems and the political jurisdictions would make it difficult to ensure the integrity of a single Rocky Mountain World Heritage Site in any meaningful manner". The Rocky Mountain area's complex administration was contrasted with the Great Barrier Reef World Heritage Site which, although it spans 1200 miles of Australian coastline, is under a single planning body, the Great Barrier Reef Marine Park Authority. As well, the Americans were concerned that World Heritage designation would limit the use of national parks (Peter Bennett, pers.

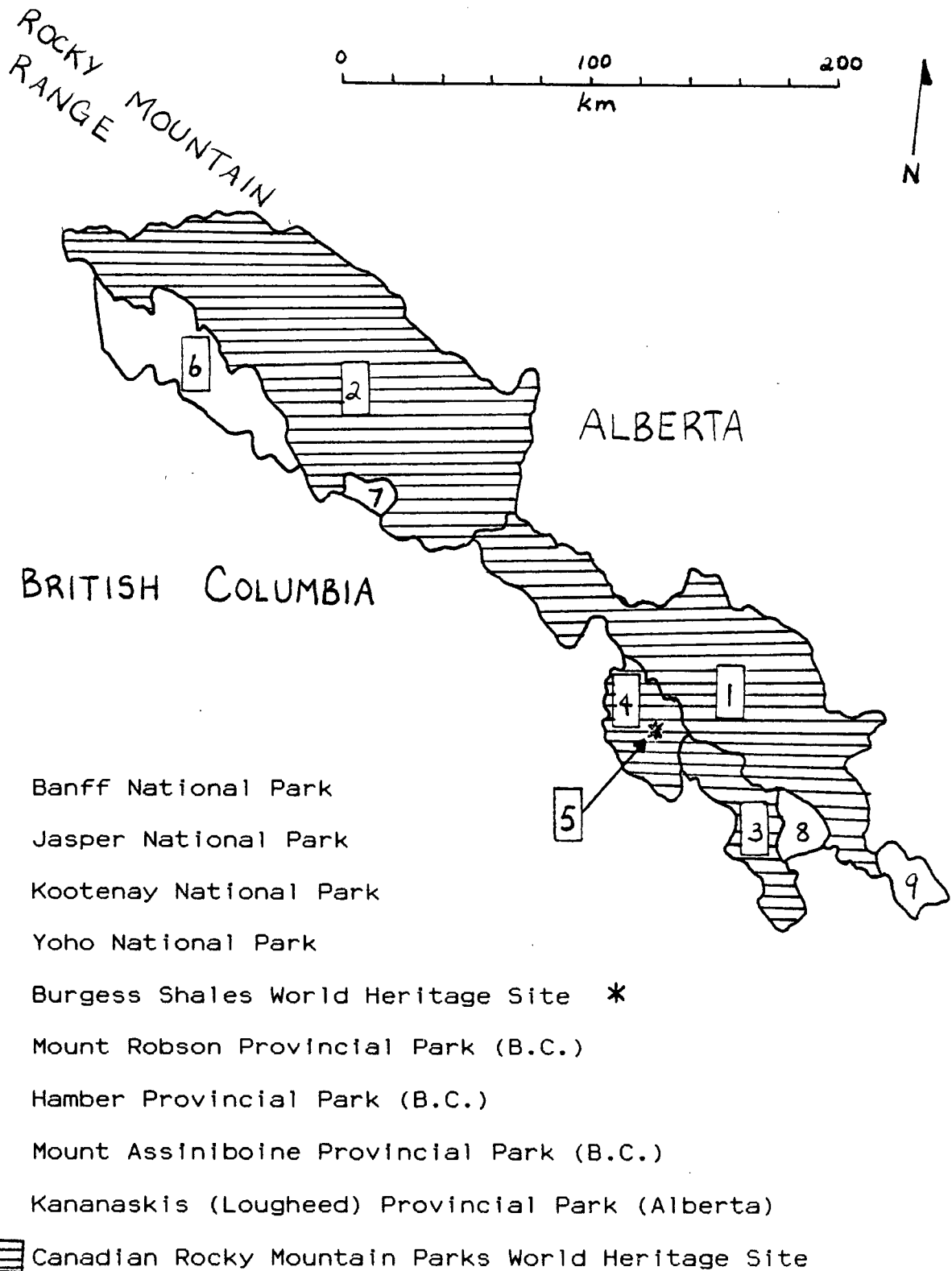


comm.)). At the same March, 1983 meeting, the Canadian delegation revealed their plans to nominate the Banff/Jasper complex for dedication during the national park centennial in 1985.

The task of drawing up the World Heritage Site nomination, including establishing the boundaries and relations with British Columbia and Alberta, was left to staff in the Western Regional Office of Parks Canada, particularly Jim Hartley and his staff. The resulting nomination is included as Appendix 5. Over the summer of 1983 discussions were held with the Alberta Department of Recreation and Parks and the British Columbia Ministry of Lands, Parks and Housing regarding the addition of some areas under provincial jurisdiction to the World Heritage nomination. The provincial agencies initially responded negatively (Harold Eidsvik, pers. comm.), so the nomination was forwarded to the World Heritage Secretariat in late 1983 with only Banff, Jasper, Kootenay and Yoho (including the Burgess Shale World Heritage Site) National Parks in the proposed site (see Figure 4).

During the review of the Rockies nomination in 1984 by the IUCN, James Thorsell, Executive Officer of the Commission on National Parks and Protected Areas of the IUCN, wrote to the Canadian provincial authorities regarding the importance of the inclusion of Mount Robson (B.C.), Mount Assiniboine

FIGURE 4: THE CANADIAN ROCKY MOUNTAIN PARKS WORLD HERITAGE SITE



(B.C.), Hamber (B.C.) and Kananaskis (Alberta) Provincial Parks in the nomination. The World Heritage Bureau, meeting June, 1984 to give preliminary consideration to the World Heritage nominations, made the following statement to the Canadian authorities regarding the Rockies nomination:

The Bureau noted that this nomination includes the Burgess Shale Site, inscribed on the World Heritage List under criterion (i). The Bureau requested the Canadian authorities to consider adding Mt. Robson, Mt. Assiniboine, Kananaskis, Fortress and Cummins Lake and a large portion of the Columbia Icefield to the nominated area. The Bureau furthermore invited the Canadian authorities to continue to ensure that urbanization and heavy tourism did not jeopardize the natural integrity of the site.

Environment Minister Suzanne Blais-Grenier wrote to the provincial authorities in early November, 1984, encouraging their participation in nominating parts of the World Heritage Site. She received the following responses (see Figure 4 in this Chapter for an indication of the relative location of sites):

My Ministry is presently reviewing the possibility of having Mount Robson, Hamber, and Mount Assiniboine Provincial Parks included in the nomination. I expect to be able to advise you of the outcome of our review early in the new year (Anthony Brummet, then B.C. Minister of Lands, Parks and Housing to Suzanne Blais-Grenier: November 16, 1984).

Our participation in the Canadian Rockies site nomination would be inappropriate considering the high quality and extensive area of the resource already represented in the present nomination (Peter Trynchy, Alberta Minister of Recreation and Parks to Suzanne Blais-Grenier: November, 24, 1984).

To date no arrangements have been made for the inclusion of provincial sites in the Canadian Rocky Mountain Parks World Heritage Site, despite the fact that the World Heritage Committee, in accepting the Rockies site as a World Heritage Site, requested,

... the Canadian authorities to consider adding the adjacent Provincial Parks of Mount Robson, Humber, Mount Assiniboine and Kananaskis to this property.

The Committee comments continue:

Furthermore, the Committee agreed to incorporate the Burgess Shale site in this property, which henceforth would not be separately indicated on the World Heritage List. Finally, the Committee decided that the site be designated as the "Canadian Rocky Mountain Parks" to specify the precise boundary of the property within the entire chain of the Rocky Mountains.

The name of the site was a point of considerable debate within the Committee (James Thorsell, pers. comm.), and reflects a desire to include more than just the parks of the Rocky Mountain complex on the World Heritage List. As well, the essential "delisting" of the Burgess Shale World Heritage Site by its inclusion in the Rockies site caused only a small amount of concern, due to Canada's perceived sincerity regarding fulfillment of the requirements of the World Heritage Convention (James Thorsell, pers. comm.).

After the approval of the Canadian Rocky Mountain Parks site as a World Heritage Site in the fall of 1984, then Environment Minister Suzanne Blais-Grenier left the door open

for provincial participation in the site in a communication to British Columbian and Albertan authorities announcing the acceptance of the site by the World Heritage Committee:

Should you wish to amend this nomination to incorporate provincial features of world heritage significance, my officials would be pleased to offer their assistance at your convenience.

Responses to the more recent letter have indicated that B.C. may be interested in including Mount Robson Provincial Park, but is not as yet ready to proceed with negotiations (Harold Eidsvik, pers. comm.). Other sites in British Columbia are still being considered for inclusion as part of the World Heritage Site. Alberta is not interested in including Kananaskis Provincial Park as it is already financially supporting extra management costs associated with the Dinosaur Provincial Park World Heritage Site (Harold Eidsvik, pers. comm.). Alberta's concern about extra management costs is the only concern about additional financial responsibilities that the present author has heard. It was understood by the author from interviews with various parties associated with the convention that management costs would not differ substantially from the costs to protect the land under the domestic protection method.

## 7.2 Evaluating the Difference Between the World Heritage Convention and Domestic Protection Measures with Respect to the Canadian Rocky Mountain Parks World Heritage Site

An evaluation requires the use of criteria against which the various items being compared may be evaluated. The criteria for the present evaluation were developed in Chapter 2 and include,

### Types of Activities Criteria

Criterion 1: Nature of Permitted Recreational Activities

Criterion 2: Nature of Permitted Resource Extraction

### Inclusiveness of Purpose Criteria

Criterion 3: Scale and Scope of Protection

Criterion 4: Inclusion of Non-Utilitarian Values

Criterion 5: Breadth of Purpose

Criterion 6: Intrinsic Value

### Strength of Protection Criteria

Criterion 7: Durability

Criterion 8: Definability

### Implementability Criteria

Criterion 9: Susceptibility to Political/Financial Expediency

Criterion 10: Implementability.

The purpose of the evaluation is the determination of the incremental difference which use of the World Heritage Convention may offer in comparison with existing domestic protection measures. It should answer why Canada bothers to

involve herself with the Convention when she already has a broad variety of domestic protection measures. It also will address the role of the World Heritage Convention in resolving the many resource conflicts in the Canadian Rockies. Following the direct evaluation using the criteria from Chapter 2, there is a discussion of the strengths and weaknesses of the World Heritage Convention's use in Canada in accomplishing the goal of rigorous protection.

### Types of Activities Criteria

The types of activities permitted by a land protection scheme suggested two criteria, the Nature of Permitted Recreational Activities and the Nature of Permitted Resource Extraction. Domestic protection measures vary in their permission of motorized versus non-motorized recreation. Chapter 3 indicates that both types of recreation are permitted in Banff, Jasper, Kootenay and Yoho National Parks, and in other parts (protected and non-protected) of the Canadian Rockies region, to the concern of those interested in rigorous protection. The World Heritage Convention permits motorized recreation and resource extraction as long as they do not degrade the resource sufficiently to eliminate the reasons which permitted establishment of the site as a World Heritage Site in the first place. No particular requirement for monitoring is implied by the permitting of those forms of resource extraction or recreation. Resource

extraction, in the senses implied by mining, forestry, hydroelectric dam development, etc., were conducted in the past, but are not commonplace at present in the national parks. However, oil and gas well development is permitted under provincial legislation on all Alberta provincial lands except Wilderness Areas, so this is an ongoing problem in most areas of the Canadian Rockies.

The critical resource "development" which potentially affects all domestically protected areas is development for recreational purposes. The development of resources for recreational purposes has been done and may be expected to continue in the Rockies region, especially in light of the Four Mountain Parks plan options. The World Heritage Bureau warned against the effects of urbanization and tourism on the natural integrity of the Canadian Rocky Mountain Parks site, but their warnings have gone unheeded. A letter by former Environment Minister Charles Caccia to Peter Trynchy, head of Alberta Recreation and Parks, of February 24, 1984 regarding the Four Mountain Parks "management plans" notes,

With regard to your concern that World Heritage Site status could result in additional constraints to future development in these national parks, I should mention that the Parks Canada planners in our Western Regional Office who were involved in preparing the management plans also prepared the World Heritage nomination.

I am confident that there will be no conflict with visitor use of the management plans. The key feature which have been highlighted in the nomination relate to ongoing natural processes which in any case are well protected as part of the mandate of Parks Canada.



Caccia's comments are cause for concern for people with a land protection bias, and it is still unclear how the current Environment Minister will deal with this issue as the Four Mountain Parks Plan is still being considered. Within the existing protected areas, even the Four Mountain Parks Plan's option with the greatest development orientation is allowable (James Thorsell, pers. comm.) under the Convention and could lead to serious losses of habitat through direct alienation, incremental losses and the foreclosure of future options. However, the Four Mountain Parks planning process was constrained in the development of options by the presence of World Heritage status on the four parks, and was subject to international comment (Jim Hartley, Parks Canada Western Regional Planner, pers. comm.), probably due to its international status. The World Heritage Convention offers little hope in combatting the threat of recreational development in the Canadian Rockies.

#### Inclusiveness of Purpose Criteria

Four criteria are suggested by the inclusiveness of the purpose(s) for which site(s) are designated: the Scale and Scope of Protection; the Inclusion of Non-Utilitarian Values; the Breadth of Purpose; and, the Intrinsic Value. With regard to the scale and scope of protection, some domestic protection measures protect whole ecosystems while other measures (e.g., the Migratory Birds Convention Act, the

Canada Wildlife Act, and numerous private land protection bodies) focus their efforts on the protection of a few species. The World Heritage Convention takes an ecosystematic approach to the protection of land: included in its criteria to establish whether a site should be on the World Heritage List is the ecosystematic criterion (iv) habitats (from the World Heritage criteria listed in Appendix 3). It is difficult to determine whether the domestic protection measures use non-utilitarian values as part of their decision making process. Certainly the World Heritage Convention's criterion (iii), exceptional beauty, hints at the recognition of the aesthetic/spiritual values of a site to humans. Domestic protection measures vary in their breadth of purpose. Some sites are protected for a wide variety of reasons, others are protected only for one of many reasons (e.g., research, recreation, or resource banking). Reasons behind the World Heritage Convention, given in Chapter 5, indicate the broad philosophical basis of the Convention. The emphasis on the global value of a site and the allowance of a variety of activities on World Heritage Sites (e.g., research, recreation, species protection, etc.) reflect the many reasons for the protection of land under the convention. The Canadian Rocky Mountain Parks Site is indicative of a site protected for many reasons as it is protected under all four of the World Heritage Convention's selection criteria, of which only one is required for designation as a World Heritage natural property: it is

representative of; (i) earth's evolutionary history, (ii) ongoing geological processes, (iii) exceptional natural beauty, and, (iv) habitats.

Protection of the intrinsic value of a site may be precluded by previous representation of a similar ecosystem in many domestic protection measures (e.g., if the Natural Area of Canadian Significance is represented, an intrinsically valuable site may not be considered for protection as a national park). The World Heritage Convention measures sites on the basis of their "universal significance" and therefore uses a comparative scale. The scale, however, is so broad that it may be seen to protect sites on the basis of their intrinsic value. The World Heritage Convention has been criticized for its emphasis on universally significant sites, but it is the current author's opinion that the scale used by the convention is not restrictive (e.g., the Rockies could be further protected despite the presence of the Canadian Rocky Mountain Parks World Heritage Site). The existing Canadian Rocky Mountain Parks World Heritage Site may serve as a core, to which additional areas in the Rockies region (if of universal significance) may be added. The World Heritage Convention thus offers a valuable tool in providing broad (i.e., for a wide variety of reasons) protection of whole ecosystems, including the recognition of non-utilitarian values, in the Rockies region.

### Strength of Protection Criteria

Protection strength refers to the Durability, the Definability, and the Susceptibility of the Protection Method to Political/Financial Expediency. Most domestic protection measures are ongoing, but some are of limited duration (e.g., the IBP) or are rarely used (e.g., the Greenbelt Act and Environment and Land Use Act in B.C. and the Wilderness Areas, Ecological Reserves and Natural Areas Act in Alberta. As well, the status of some provincial parks in B.C. has rather suddenly changed, from a highly protected status (Class A) to a status which permits resource extraction (Class B), thus reducing the ongoing protection of the sites from resource extraction. The designation of sites, including the Canadian Rocky Mountain Parks site, under the World Heritage Convention is in perpetuity, subject only to maintenance of the values for which they were designated. This feature is of importance in light of the concerns about the susceptibility of sites to local change in response to ministerial discretion.

As noted in Chapter 4 (Section 4.2), the legal definition of sites has been a problem with the MAB program (all other protection mechanisms have defined geographical coordinates). Sites under the World Heritage Convention must also be legally defined. In the Canadian Rocky Mountain Parks case, they are defined as Banff, Jasper, Kootenay, and

Yoho National Parks which are defined in the schedule to the National Parks Act. The problems encountered due to the susceptibility of protection measures to political/financial expediency are reviewed in Chapters 3 and 4. The provincial and federal environment ministers have a great deal of political influence as to whether a given site is protected or not (and to what extent). As well, funding to ensure ongoing protection of existing sites or to protect new sites, is at the ministers' discretion. It is with regard to the political expediency issues that the World Heritage Convention offers a great deal to sites such as the Canadian Rocky Mountain Parks site. International financial support for Canadian sites is unlikely due to Canada's relative wealth on a world scale, but the maintenance of the convention itself requires relatively little financial backing as the staffing and other costs differ little from those encountered without World Heritage Site status. Assistance in dealing with political expediency issues is a particularly important advantage of the convention. Activity which is likely to result in delisting of the Canadian Rocky Mountain Parks site is unlikely to occur due to the severe political ramifications to Canada of such an act. It would be very politically difficult, as an example, for Canada to try to change the borders of the parks in the future. The Tasmanian situation is a good example of the value of World Heritage status in bringing an area to political attention and in reducing the susceptibility to political expediency.

The role of the public as watchdog was critical, and was based heavily on the international status of the site (The Wilderness Society, 1983). The World Heritage Convention is a sufficiently popular convention that it is very unlikely to become ignored by Canada or at the international level. It also offers the Canadian Rockies ongoing protection of a defined area of land.

### Implementability Criteria

Domestic protection measures regularly encounter opposition and are therefore difficult to implement. The problems surrounding the Pacific Rim National Park Reserve and difficulties in assigning it full national park status are good examples of opposition surrounding protected area creation. Because World Heritage Site status is placed only on previously protected areas, the types of problems with boundary establishment encountered by Pacific Rim will not happen with World Heritage Sites. As well, because World Heritage status confers international prestige on the area, it is the author's opinion that in most cases the designation of World Heritage Sites generally lacks substantial opposition, and may in some areas be enthusiastically received. It is difficult, however, to gauge the reaction of the provincial governments to efforts to include provincially protected sites in joint federal/provincial World Heritage Sites. If British Columbia's and Alberta's reluctance to get

involved in the Canadian Rocky Mountain Parks World Heritage Site is any indication, implementation of the World Heritage Convention at the provincial level may be difficult. In general, though, it may be expected that due to previous protection on the sites, the World Heritage Convention may be considered a very implementable land protection mechanism.

#### General Observations on Strengths and Weaknesses of the World Heritage Convention

The principal advantage to the Rockies region and Canada of the World Heritage status is the prestige and international recognition which is brought to the area. Without exception the people involved with the World Heritage Convention that were interviewed by the present author emphasized the role of international prestige as the quintessential benefit of the Convention to developed nations such as Canada. Most nations consider that they will obtain international political advantage through their involvement in nominating sites and participating in the World Heritage Convention. As Lyster (1985: 210) also notes, wealthy countries additionally get the satisfaction that their financial and technical expertise contributions will be spent on the conservation of some of the most outstanding natural and cultural sites of the world. Further discussion of the differences in benefits between rich and poor nations is reserved to Section 7.3.

The necessary international leverage/opprobrium to ensure protection of sites may be levied by nations as a result of the international awareness raised by establishing the site as a World Heritage Site. Parks Canada personnel obtained international comment on the Four Mountain Parks Planning Process, likely due to the site's World Heritage status (Jim Hartley, pers. comm.). From a national perspective, the legislation enacted by the Australian Commonwealth government played an important role in giving it the ability to fulfill international obligations. The World Heritage Convention may be particularly attractive to senior governments that are constitutionally federal due to the leverage it can provide in matters pertaining to the provinces, states, cantons, etc. Canada would be well advised to solidify her involvement in the World Heritage Convention with federal legislation.

The primary problems with the convention are the acceptance of some forms of resource extraction (including motorized recreation) and the lack of a formal monitoring process to ensure that sites are not protected when degraded to the point that the values for which they were designated are eliminated. The informal IUCN network may in effect adequately monitor World Heritage Sites: certainly the IUCN and World Heritage Secretariat are generally well informed of problems pertaining to World Heritage Sites (J. Thorsell and J. Robertson, pers. comm.). The existence of a delisting



procedure has been a reasonably strong deterrent to severe site degradation because most nations are unwilling to face the political consequences which would result from delisting. As Parks Canada notes in its "Unesco World Heritage Briefing Book",

the provision in the Committee's Operating Guidelines for delisting a site which ceases to possess the qualities for which it was put on the World Heritage List in the first place is a significant negative sanction and will undoubtedly give added protection, legal and otherwise, to World Heritage Sites, in that if a country allows a World Heritage Site to deteriorate significantly it is, in effect, breaking an international treaty and anyhow, no country would want to be in the embarrassing position of having one of its World Heritage Sites "defrocked" by the World Heritage Committee.

The current lack of delisted sites means that the political implications of delisting are difficult to assess. Clearly the political response in Australia to the Fraser government's lack of enforcement of the World Heritage Convention was strongly negative in 1983.

The Hawke government's expenditures to achieve protection in the Gordon-Upon-Franklin area raise an issue of concern: if large compensation payments are needed to respond to serious threats of degradation to a World Heritage Site, how well protected are World Heritage Sites? Getting special funds from perpetually strapped federal budgets will be a function of the environment minister's commitment to the World Heritage Convention and his or her political power within the government as it relates to their ability to

obtain funds. Blais-Grenier's actions under that sort of situation might have been easier to anticipate than those of the current Environment Minister. It is hoped that Canada takes her international obligations seriously enough that she would be willing to financially support sites designated under the World Heritage Convention, but until a serious threat is imposed on a site, it is anyone's guess as to how Canada will respond.

Some might argue that a land protection method that necessitates previous protection before a site can be nominated, and which penalizes threat or damage to the site's integrity with not continuing to protect them, would be a strange and ineffective protection method. Because the international community has no jurisdiction to legally enforce the protection of land on a particular sovereign nation, it is necessary that the nation itself recognizes the site as valuable and commits itself through intranational legislation to protecting that site. In the Canadian Rockies, the Canadian government is committed to protecting the territory encompassed by Banff, Jasper, Kootenay and Yoho National Parks. By insisting on the nation designating the site before consideration as a World Heritage Site, intranational disputes regarding the boundaries of the parks have been concluded and are not debated in the international arena. The conferral of World Heritage status also serves to advertise the existing national protection on the site which

may increase national pride and concern for the area. The publicity surrounding the official designation of the Canadian Rocky Mountain Parks World Heritage Site, particularly in light of His Royal Highness Prince Philip's attendance, put the four national parks in a favourable light within Canada.

The implementation of the World Heritage Convention, though, must keep a delicate balance between the desire to ensure the strong protection of universally significant sites and maintaining the sovereignty of participating nations. By definition, maintenance of sovereignty makes more direct methods of evaluation and regulation of negative changes in sites difficult if not impossible. The delisting sanction may be considered the only option available to an international convention such as the World Heritage Convention. Delisting is a form of opprobrium which is likely to contribute to the erosion of international respect for the delisted nation and may negatively influence negotiations on other natural resource issues (e.g., the establishment of fishing limits).

When one looks at the full range of benefits of the World Heritage Convention (in comparison with Canadian protection methods), they can be seen as outweighing the problems associated with the convention for the purposes for which it

was developed. The World Heritage Convention's advantages are numerous, they include,

1. conferral of prestige and international recognition on the nation and site nominated
2. reduced susceptibility to political/financial expediency
3. protection of whole ecosystems
4. recognition of non-utilitarian values
5. a wide breadth of purpose
6. protection of sites for their intrinsic value on a universal scale of comparison
7. durable protection
8. the extent of sites is definable
9. relatively low public opposition to establishment
10. informal monitoring by the IUCN and delisting procedures provide leverage for ensuring ongoing site protection.

The key disadvantages, and they are serious ones in the present author's opinion, to the World Heritage Convention are the permission of resource extraction and motorized recreation, and the lack of a formal monitoring procedure.

As noted previously, the lack of a formal monitoring procedure may be considered inevitable in ensuring national sovereignty. The permission of resource extraction and motorized recreation may also be considered inevitable in ensuring the protection of areas which are less developed than North America, Europe, etc. When people are hungry, it

is difficult to argue for setting aside natural resources which might in the short term alleviate their immediate hunger, notwithstanding that the long term productivity of a region depends on the provision of some areas which are left undeveloped. Section 7.3 discusses some of the international aspects of the World Heritage Convention in greater detail.

### 7.3 The Application of the World Heritage Convention at the Global Scale and its Implications for Resource Planners.

When evaluating the World Heritage Convention's efficacy in the Canadian land protection scene, many of the international aspects of the convention are not relevant, yet in a comprehensive assessment of the convention's benefits those aspects should be considered. The present section examines Canada's role in comparison with the role of less developed nations. Enforcement mechanisms in international law are examined to give some insight into the reasons behind the lack of a formal monitoring system. Two politically controversial situations are also reviewed and both give examples of the difficulties associated with sovereignty questions. Some reasons behind the permission of resource use under the convention are reviewed briefly. The purpose of bringing up the international aspects of the World Heritage Convention is to set the advantages and disadvantages to Canada in context. It must be remembered that when considered from a global perspective, which the World Heritage Committee does, the threats to Banff, Jasper, Kootenay and Yoho National Parks are not as urgent an issue as losses of whole biomes, species and vast areas of wildlife habitat which are being experienced by other parts of the world through rain forest mining, flooding due to massive dam construction, losses of ground cover in arid areas, acid rain effects, etc.

As mentioned previously the benefits of the World Heritage Convention differ between rich and poor nations. During interviews both Jane Robertson of the World Heritage Secretariat and James Thorsell of the IUCN believed that the priority in participating in the World Heritage Convention for wealthy nations like Canada should be providing assistance for less well-endowed nations rather than just protecting domestic sites. Lyster describes the reason for the broad appeal of the Convention:

(1) It provides a vehicle for all Parties to gain international recognition for areas of outstanding natural or cultural value situated within their territories; it provides the poorer Parties with the prospect of receiving financial and technical assistance for the protection of these sites; and the administrative structure established by the Convention provides an assurance to the wealthier Parties, whose contributions to the World Heritage Fund are likely to exceed the value of any financial or technical assistance which they may receive, that their money will be effectively spent on the conservation of some of the most outstanding cultural and natural sites in the world (Lyster, 1985: 210 - 211).

The relatively strong involvement of Canadian officials and sincere Canadian participation in the World Heritage Convention is seen by Parks Canada officials to be a catalyst for encouraging the involvement of other nations, both rich and poor in the Convention's activities. Participation in the Convention also demands the provision of appropriate protection measures for sites. Lyster (1985) uses the Darien National Park in Panama as an example of the role of the Convention in encouraging protection. He quotes the IUCN

recommendation to the World Heritage Committee as stating that

the area is under powerful pressures from north and south for a wide range of purposes, many of them inimical to the national park's interests (and the interests of Panama as a whole) ... Awarding World Heritage status to this unique and particularly important area will provide additional leverage for long-term protection of the area... Panama is very concerned to establish political control over the area. The early awarding of support to the newly established national park will help ensure its proper management and development, with particular reference to boundary demarcation and to integration of the area into overall regional development plans (emphasis in original) (Lyster, 1985: 216).

The concerns about the formal monitoring of sites and the reluctance to delist sites raised in Section 7.2 are inherent in international legal arrangements. Lyster (1985) outlines the differences in enforcement mechanisms available under international law when compared with domestic law. Disputes which persist despite negotiation may be brought to the International Court of Justice at the Hague but require the consent of the prospective defendant. As a general rule

states are reluctant to take each other to the International Court, partly because it is seen as a politically unfriendly act to be avoided if possible and partly because it is often difficult to achieve a satisfactory remedy by this means (Lyster, 1985: 11).

Alternative measures more commonly used to ensure compliance with international treaties and conventions include "requiring its Parties to meet regularly to review its implementation, ... the establishment of an administrative body to oversee and assist in the implementation" (Lyster, 1985: 12), and the establishment of reporting requirements.



Other measures which can help enforcement include observer schemes, systems of inspection, financial sanctions, ascribing trading disadvantages to States which do not comply with a treaty's terms and offering financial lures for those which do (Lyster, 1985: 13).

The World Heritage Convention makes use of regular (annual) meetings, an administrative body, and informal IUCN observations to ensure each nation's compliance. At the informal level it is not known whether inducements and/or disbenefits are used by individual nations to ensure compliance by other individual nations, but some of these types of political trade-offs are expected to occur according to Richard Bill of Parks Canada (pers. comm.).

The provision of national legislation by each signatory nation is the most legally enforceable method of ensuring compliance with international conventions. In most cases some form of national legislation supports sites under the World Heritage Convention but often participation in the World Heritage Convention is the catalyst for establishing such legislation. In Canada's case both provincially and federally legislated sites are included in the World Heritage List. In the Tasmanian situation, domestic protection legislation was additionally supported by a national act dealing with Australia's participation in the World Heritage Convention. It was the latter legislation which permitted ongoing protection of the Gordon-Upon-Franklin area. As Lyster notes, the overriding factor ensuring compliance is that

it is in the interests of almost every State that order, and not chaos, should be a governing principle of human life; and if treaties were made and freely ignored chaos would soon result (Lyster, 1985: 14).

Implementation of the World Heritage Convention has not been without controversy. The "Old City of Jerusalem and its Walls" were nominated by the Hashimite Kingdom of Jordan for inscription on the World Heritage List. In an extraordinary session (i.e., called separately from the ordinary sessions) of the World Heritage Committee held in Paris, September 10 and 11, 1981, the nomination was accepted by a vote of 14 for, 1 against and 5 abstentions. Quotes are used extensively in the present discussion to ensure accurate reporting of this political issue. As noted in the rapporteur's report,

it became evident that there was widespread support that a property as outstanding as the Old City should be inscribed on the World Heritage List. The majority of speakers had no reservations about Jordan's competence to make the proposal. A few speakers expressed reservations about Jordan's legal right to present the nomination and about the possible implications of inscription to questions related to the status of Jerusalem and to questions of sovereignty and jurisdiction. Although it was recognized that Article 11(3) of the Convention existed to cover these matters, these speakers were concerned that there should be no implicit or explicit recognition of the sovereignty of any State associated with the inscription. The United States Delegation objected explicitly to the nomination by Jordan as not conforming with the articles of the Convention which provide that the nominating State submit only those sites which are "situated in its territory", which require that the consent of "the State concerned" be obtained and which require that the nominating State provide an effective plan for the protection and management of the site (Report of the Rapporteur, World Heritage Committee. First

Extraordinary Session, Paris, 10 and 11 September, 1981: pp. 4 - 5).

As Lyster notes,

There was also considerable argument following Argentina's nomination of Los Glaciares National Park. At the fifth ordinary session of the World Heritage Committee, held in October 1981, Chile stated that it would study the possibility of nominating "the sector of the Glaciers Region located within its national jurisdiction", to which Argentina replied that "the whole area of the 'National Park Los Glaciares' is unquestionably situated in Argentinian territory". Again, the Argentinian nomination was eventually approved (Lyster, 1985: 220).

Lyster brings out an important point when he mentions that

Article 11(3) makes it clear that the listing of a site over which sovereignty or jurisdiction is claimed by more than one State "shall in no way prejudice the rights of the parties to the dispute". Nevertheless, some States may believe that political benefit can be derived from nominating a disputed site. Whatever the merits of the arguments in relation to the particular instances of Jerusalem and Los Glaciares, there is clearly a danger that such nominations might so aggravate political tensions that the effectiveness of the convention as a legal instrument to promote the conservation of the world's cultural and natural heritage would be seriously reduced (Lyster, 1985: 220).

The actors associated with the World Heritage Convention must walk a tightrope between concentration on the protection of the intrinsic and global values of a site and the possible use of the Convention for specific political goals as described above. It is the opinion of the present author that to date the World Heritage Committee has focussed so directly on intrinsic site values that it has set itself up for criticism of political favouritism which may in the future damage its ability to accomplish its fundamental goals. The Jerusalem and Los

Glaciares situations provide good examples of the taking of political stances in favour of particular states by the World Heritage Committee. Careful consideration must be made of each difficult political situation and it would be recommended to err on the side of political conservatism through requesting joint nominations for sites on disputed territory.

The use of World Heritage Sites for some forms of resource use, including the presence of and performance of traditional uses by aboriginal people of the area (e.g., in Ngorongoro National Park, Sagarmatha National Park, etc.), raises the difficult dilemma between the need for protection of World Heritage sites and the corresponding needs of the local people. As many authors note, it is very difficult to ensure the protection of land and wildlife habitats when the local people have inadequate supplies of food, clothing, fuel and building materials. For this reason, the use of protected areas is permitted, and management efforts must concentrate on minimizing the human impact on the natural environment, and retaining the values for which the site was designated in the first place.

In examining the key question of the thesis, should the World Heritage Convention be considered an important tool for rigorous protection, it is the contention of the present author that it should be considered an important tool for

protection. Although the convention does not offer the same level of rigorous protection argued for in the early parts of the thesis, nonetheless, the advantages of the convention may be seen to outweigh the disadvantages. The many benefits of the convention are enumerated at the end of Section 7.2.

In Canada, designation under the World Heritage Convention is expected to have an important role in preventing the construction of a dam which would destroy the intrinsic value of Wood Buffalo National Park (Harold Eidsvik, pers. comm.). Similarly, the current concern regarding the South Moresby region of the Queen Charlotte Islands is partly fueled by the proposal that the area is worthy of World Heritage status.

The World Heritage Convention has been given short shrift by resource protection planners in the past. Planners should take the following points into consideration:

1. The World Heritage Convention takes a global view, so relatively small regional issues are unlikely to be assisted by the Convention, but larger regional issues (e.g., the Tasmanian dam situation, and the damming of the Slave River near Wood Buffalo National Park) can be aided through the Convention;
2. The Convention provides a concrete recognition of the earth's natural and cultural treasures, in a way that also provides funding and technical assistance for

restoration and protection of the treasures when necessary;

3. The advantages and disadvantages of the Convention, listed in Section 7.2, bear serious consideration even when a site is already protected under other legislation.

In conclusion, although the World Heritage Convention is a relatively young international convention it is already a valuable land protection tool. Critical issues regarding its efficacy are beginning to arise and be confronted by the World Heritage Committee. It may be expected that the final test of the efficacy of the Convention will be seen in the health and protection of the many World Heritage natural and cultural sites throughout the world over time.

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APPENDIX 1:List of Interviews

<u>Date</u>	<u>Name and Affiliation</u>
May 16, 1985	Jean Brown, Chief, Intergovernmental Affairs, Parks Canada, Ottawa, Ontario
May 20, 1985 and September, 1985	James Thorsell, Executive Officer, Commission on National Parks and Protected Areas, International Union for Conservation of Nature and Natural Resources (IUCN), Gland, Switzerland
May 23 and 24, 1985	Richard Bill, Parks Canada planner, seconded to the World Heritage Secretariat, Paris, France
May 23, 1985	Margaret Van Vliet, former World Heritage Secretariat representative on cultural heritage, Paris, France
May 23 and 24, 1985	Jane Robertson, World Heritage Secretariat representative for natural heritage, Paris, France
May 24, 1985	David MacIntyre, Australian Permanent Delegation to Unesco, Paris, France
June 10, 1985 September, 1985	Harold Eidsvik, Chairman, Commission on National Parks and Protected Areas, IUCN, and Parks Canada, Ottawa, Ontario
June 13, 1985	Peter Bennett, former director of National Historic Parks and Sites Branch, Parks Canada, met in Victoria, B.C.
August 13, 1985	Philip Dearden, National and Provincial Parks Association of Canada, British Columbia sector, and Department of Geography, University of Victoria, Victoria, B.C.
August 13, 1985	John Dick, B.C. Ministry of Environment's Assessment and Planning Division, Victoria, B.C.
August 13, 1985	Linda Foubister, B.C. Ministry of Environment, Wildlife Branch, Habitat Specialist, Victoria, B.C.
August 14, 1985	Stephan Fuller, Federation of Mountain Clubs of British Columbia, Vancouver, B.C.

- September 7, 1985 Steve Herrero, School of Environmental Design, University of Calgary, Calgary, Alberta
- September 9, 1985 Herb Kariel, Sierra Club and Department of Geography, University of Calgary, Calgary, Alberta
- September 9, 1985 Vivian Pharis, Alberta Wilderness Association Calgary, Alberta
- September 10, 1985 Don Pike, former planner with the Parks Canada Four Mountain Parks planning process, currently with Ducks Unlimited, Calgary, Alberta
- October 11, 1985 Robert Garvey, Executive Director, Advisory Council for Historic Preservation, Washington, D.C. (met in Seattle, Washington)

APPENDIX 2:Definitions of Levels of Inclusion in Conventions

- Ratification: the act or process of formally ratifying, adopting or confirming a contract, treaty or other transaction by the parties, which they were not legally bound by originally.
- Acceptance: the taking and receiving of anything in good part and as it were a tacit agreement to a preceding act, which might have been defeated or avoided if such acceptance had not been made.
- Accession: the absolute or conditional acceptance by one or several nations of a treaty already concluded between other sovereignties. It may be of two kinds: first, the formal entrance of a third state into a treaty so that such nation becomes a party to it, and this can only be with the consent of the original parties; second, a nation may accede to a treaty between other nations solely for the purpose of guarantee, in which case, though a party, it is affected by the treaty only as a guarantor.

(Produced by Parks Canada staff for their edification for international conventions, agreements, and treaties).

APPENDIX 3Criteria for the Inclusion of Natural Properties in the World Heritage List

23. In accordance with Article 2 of the Convention, the following is considered as "natural heritage":

"natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view;

geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation;

natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty."

24. A natural heritage property - as defined above - which is submitted for inclusion in the World Heritage List will be considered to be of outstanding universal value for the purposes of the Convention when the Committee finds that it meets one or more of the following criteria and fulfils the conditions of integrity set out below. Sites nominated should therefore:

- (i) be outstanding examples representing the major stages of the earth's evolutionary history; or
- (ii) be outstanding examples representing significant ongoing geological processes, biological evolution and man's interaction with his natural environment; as distinct from the periods of the earth's development, this focuses upon ongoing processes in the development of communities of plants and animals, landforms and marine areas and fresh water bodies; or
- (iii) contain superlative natural phenomena, formations or features, for instance, outstanding examples of the most important ecosystems, areas of exceptional natural beauty or exceptional combinations of natural and cultural elements; or
- (iv) contain the most important and significant natural habitats where threatened species of animals or plants of outstanding universal value from the point of view of science or conservation still survive.

25. In addition to the above criteria, the sites should also fulfil the following conditions of integrity:

- (i) The sites described in 24(i) should contain all or most of the key interrelated and interdependent elements in their natural relationships; for example, and "ice age" area would be expected to include the snow field, the glacier itself and samples of cutting patterns, deposition and colonization (striations, moraines, pioneer stages of plant succession, etc.).
- (ii) The sites described in 24(ii) should have sufficient size and contain the necessary elements to demonstrate the key aspects of the process and to be self-perpetuating. For example, an area of tropical rain forest may be expected to include some variation in elevation above sea level, changes in topography and soil types, river banks or oxbow lakes, to demonstrate the diversity and complexity of the system.
- (iii) The sites described in 24(iii) should contain those eco-system components required for the continuity of the species or of the other natural elements or processes to be conserved. This will vary according to individual cases; for example, the protected area of a waterfall would include all, or as much as possible, of the supporting upstream watershed; or a coral reef area would include the zone necessary to control siltation or pollution through the stream flow or ocean currents which provide its nutrients.
- (iv) The area containing threatened species as described in 24(iv) should be of sufficient size and contain necessary habitat requirements for the survival of the species.
- (v) In the case of migratory species, seasonable sites necessary for their survival, wherever they are located, should be adequately protected. The Committee must receive assurances that the necessary measures be taken to ensure that the species are adequately protected throughout their full life cycle. Agreements made in this connection, either through adherence to international conventions or in the form of other multilateral or bilateral arrangements would provide this assurance.

(Taken from the Operational Guidelines for the Implementation of the World Heritage Convention produced by the Intergovernmental Committee for the Protection of the World Cultural and Natural Heritage, revised, January, 1984: pp. 8-9).

APPENDIX 4Procedure for the Eventual Deletion of Properties from the World Heritage List

26. The Committee adopted the following procedure for the deletion of properties from the World Heritage List in cases:

- a) where the property has deteriorated to the extent that it has lost those characteristics which determined its inclusion in the World Heritage List; and
- b) where the intrinsic qualities of a world heritage site were already threatened at the time of its nomination by action of man and where the necessary corrective measures as outlined by the State Party at the time have not been taken within the time proposed.

27. When a property inscribed on the World Heritage List has seriously deteriorated, or when the necessary corrective measures have not been taken within the time proposed, the State Party on whose territory the property is situated should so inform the Secretariat of the Committee.

28. When the Secretariat receives such information from a source other than the State Party concerned, it will, as far as possible, verify the source and the contents of the information in consultation with the State Party concerned and request its comments. The Secretariat will inform the Chairman of the Committee of the results of its investigations and the Chairman will decide whether the information is to be acted upon. If the Chairman decides that the information is not to be acted upon, no action will be taken.

29. In all cases except those on which the Chairman decided that no further action should be taken, the Secretariat will request the competent advisory organization(s), (ICOMOS, IUCN or ICCROM), to forward comments on the information received.

30. The information received, together with the comments of the State Party and the advisory organization(s), will be brought to the attention of the Bureau of the Committee. The Bureau may take one of the following steps:

- a) it may decide that the property has not seriously deteriorated and that no further action should be taken;
- b) when the Bureau considers that the property has seriously deteriorated, but not to the extent that its restoration is impossible, it may recommend to the Committee that the property be maintained on the

List, provided that the state Party takes the necessary measures to restore the property within a reasonable period of time. The Bureau may also recommend that technical cooperation be provided under the World Heritage Fund for work connected with the restoration of the property, if the State Party so requests;

- c) when there is evidence that the property has deteriorated to the point where it has irretrievably lost those characteristics which determined its inclusion in the List, the Bureau may recommend that the Committee delete the property from the List; before any such recommendation is submitted to the Committee, the Secretariat will inform the State Party concerned of the Bureau's recommendation; any comments which the State Party may make with respect to the recommendation of the Bureau will be brought to the attention of the Committee, together with the Bureau's recommendation;
- d) when the information available is not sufficient to enable the Bureau to take one of the measures described in a), b) or c) above, the Bureau may recommend to the Committee that the Secretariat be authorized to take the necessary action to ascertain, in consultation with the State party concerned, the present condition of the property, the dangers to the property and the feasibility of adequately restoring the property, and to report to the Bureau on the results of its action; such measures may include the sending of a fact-finding mission or the consultation of specialists. In cases where emergency action is required, the Bureau may itself authorize the financing from the World Heritage Fund of the emergency assistance that is required.

31. The Committee will examine the recommendation of the Bureau and all the information available and will take a decision. Any such decision shall, in accordance with Article 13(8) of the Convention, be taken by a majority of two-thirds of its members present and voting. The Committee shall not decide to delete any property unless the State Party has been consulted on the question.

32. The State Party will be informed of the Committee's decision.

33. If the Committee's decision entails any modification to the World Heritage List, this modification will be reflected in the next updated list that is published. The reasons for the deletion of any property from the List will also be given in the publication.

34. In adopting the above procedure, the Committee was particularly concerned that all possible measures should be taken to prevent the deletion of any property from the List and was ready to offer technical co-operation as far as

possible to States Parties in this connection. Furthermore, the Committee wishes to draw the attention of States Parties to the stipulations of Article 4 of the Convention which reads as follows:

"Each State Party to this Convention recognizes that the duty of ensuring the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage referred to in Articles 1 and 2 and situated on its territory, belongs primarily to that State...".

In this connection, the Committee recommends that States Parties co-operate with IUCN which has been asked by the Committee to continue monitoring on its behalf the progress of work undertaken for the preservation of natural heritage properties inscribed on the World Heritage List.

(Taken from the Operational Guidelines for the Implementation of the World Heritage Convention produced by the Intergovernmental Committee for the Protection of the World Cultural and Natural Heritage, revised, January, 1984 pp. 9-11).



## APPENDIX 5

UNESCO, Nomination of the Canadian Rockies by Canada for Inclusion in the World Heritage List, prepared by Parks Canada staff (Ottawa? Published by authority of the Minister of the Environment, © Minister of Supply and Services Canada, 1983. QS-8806-000-EE-A1)

Booklet not filmed; unsuitable for filming.