

THE BANFF-BOW VALLEY: ENVIRONMENTAL CONFLICT,
WILDLIFE MANAGEMENT AND MOVEMENT

by

LAURIE DICKMEYER

B.A., Valparaiso University, 2007

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

in

THE FACULTY OF GRADUATE STUDIES

(Geography)

THE UNIVERSITY OF BRITISH COLUMBIA
(Vancouver)

August 2009

© Laurie Dickmeyer, 2009

ABSTRACT

The Banff-Bow Valley has been a site of environmental conflict since the creation of Banff National Park (BNP) in 1887. The study of national parks reveals what and how people conceive of nature. Wildlife management also reveals how people have thought about nonhumans throughout the history of the park. Initially, BNP was viewed as a health spa and in economic terms. This view expanded to include an appreciation for scenery and wild animals, which were considered “game” or “noxious” and “pests.” Science, attitudes and perceptions influenced management practices, and beginning in the 1960s and 1970s, ecological thinking gained prominence. At the same time, the environment and acceptable human use and development of the landscape became contentious issues. Parks Canada attempted to include public participation processes in their management planning but were mostly met with criticism. In 1994, conflicts over the doubling of the Trans Canada Highway (TCH) and threats to the park’s World Heritage status led the federal government to inaugurate the Banff-Bow Valley Study (BBVS), which was to assess, independently of Parks Canada, the state of the valley and provide management recommendations. The two-year, \$2 million study determined that “ecological integrity” was being threatened by heavy human use. The study’s Task Force provided approximately 500 specific recommendations. This work describes the BBVS process, its public reception and Park Canada’s reaction to the Task Force’s findings. In conclusion, the topic of wildlife movement and corridors is explored further. This work asks how humans should live with wildlife in BNP, especially since some of these nonhuman animals are predators. Science cannot provide the answer to this question to make management decisions. Rather, we look to thinking on nonhuman movement in the social sciences, which point to a more flexible and respectful vision of human and nonhuman coexistence.

TABLE OF CONTENTS

Abstract	ii
Table of Contents	iii
List of Figures	iv
List of Abbreviations.....	v
Acknowledgments.....	vi
Chapter 1: Introduction	1
Chapter 2: Banff: A History of Development, a History of Environmental Conflict—from the Creation of Banff National Park to the 1990s	14
Chapter 3: The Banff-Bow Valley Study—“At the Crossroads”	47
Chapter 4: The Aftermath—Public Perception and Government (Re)action.....	76
Chapter 5: Conclusion—Beyond Banff: The Concept of Ecological Integrity and Wildlife Movement Corridors	99
Bibliography	128

LIST OF FIGURES

Figure 1.1: Map of Banff National Park	10
Figure 2.1: Elk graze Near the Canadian Pacific Railway Line	19
Figure 2.2: Banff Springs Hotel and Bow Falls	21
Figure 2.3: Banff Park Museum Interior	34
Figure 3.1: The Trans Canada Highway near Canmore, AB	49
Figure 3.2: View of the Bow River from Sulphur Mountain	50
Figure 3.3: Banff Avenue	51
Figure 3.4: Banff-Bow Valley Study Process Phases	55
Figure 3.5: Editorial Cartoon: “Trans-Canada Highway Twinning Given Go Ahead...”	58
Figure 3.5: The Banff-Bow Valley Study Round Table [Diagram]	62
Figure 4.1: Editorial Cartoon: “Ottawa Valley Study”	78
Figure 5.1: Rocky Mountain Sheep Feed on a Mountain, a Highway in the Background	99
Figure 5.2: A Wildlife Overpass in Banff National Park	104
Figure 5.3: A Wildlife Underpass in Banff National Park	105
Figure 5.4: Elk Graze Behind Fencing along the Trans Canada Highway	105
Figure 5.5: Rest Stop Display about Wildlife Overpasses	110
Figure 5.6: Parks Canada Wildlife Corridor Sign.....	112
Figure 5.7: Sign Telling the Public not to Feed Rocky Mountain Sheep	119

LIST OF ABBREVIATIONS

AMPPE	Association for Mountain Parks Protection and Enjoyment
AWA	Alberta Wilderness Association
BBVS	Banff Bow Valley Study
BCEAG	Bow Corridor Ecosystem Advisory Group
BNP	Banff National Park
CEA	Cumulative Effects Assessment
CEAA	Canadian Environmental Assessment Act
CORE	Commission on Resources and Environment
CPAWS	Canadian Parks and Wilderness Society
CPR	Canadian Pacific Railway
EOP	Ecological Outlooks Project
IPS	Integrated Problem Solving
IUCN	International Union for the Conservation of Nature
NPPAC	National and Provincial Parks Association
OCA	Outlying Commercial Accommodation
PART	Preserving the Access, Recreation, and Tradition of the Bow Valley Parkway
TCH	Trans Canada Highway
UNESCO	United Nations Educational, Scientific and Cultural Organization
Y2Y	Yellowstone to Yukon Conservation Initiative

ACKNOWLEDGEMENTS

I would like to thank first of all my supervisor, Matthew Evenden, who always provided wise and patient advice, good feedback on my work, and always in a prompt and timely fashion. I also appreciate the guidance and knowledge of professors with whom I took courses, worked and interacted: Juanita Sundberg, Trevor Barnes, Jim Glassman, Terre Satterfield, Philippe Le Billon, David Ley, Graeme Wynn, and Sally Hermansen. My fellow graduate students, especially my fellow Master's students, Rosemary-Claire Collard, Justin Tse, Sarah Brown, Tammy Elliot, Melissa Ewan, James Hudson and Eileen Jones, have been a source of support, information, and inspiration. I would also like to acknowledge the UBC Department of Geography for its support financially and otherwise. I would also like to thank NiCHE's¹ Canadian water history project, which I served as a research assistant.

Thanks also go to interviewees, who kindly volunteered their time to speak with me about their experiences and referred me to sources and people who could be of help. They were invaluable for the development of this project. The archivists at the Whyte Archives in the Town of Banff were indispensable for this project. Cathy Hourigan, the librarian of the Warden Office, called attention to a plethora of reports, books, and articles concerning the Banff-Bow Valley study, the Trans-Canada Highway, and wildlife management in Banff National Park, and went out of her way to provide assistance in finding further materials. I would also like to thank the Yellowstone to Yukon (Y2Y) Conservation Initiative for letting me peruse their library of materials in Canmore, Alberta, and the Canadian Parks and Wilderness Society (CPAWS) in Calgary, Alberta. I am grateful to Liza Piper, Zac Robinson, Ian MacLaren, and the participating graduate students from the University of Alberta for organizing the 2009 Banff National Park Field Trip.

¹ Network in Canadian History & Environment/Nouvelle initiative en histoire de l'environnement

Chapter 1: Introduction

The Town of Banff is the largest townsite inside the borders of a North American park (Cornwell 2004:166). Banff National Park is one of two national parks in North America with a major transportation corridor running through it.¹ In March 1994, the Minister of Canadian Heritage announced a study to be made independently of Parks Canada examining the state of the Banff-Bow River Valley and make recommendations on its management. The Banff-Bow Valley Study (BBVS) was to last two years, have generous funding, and consider the ecological, economic and social aspects of life in Banff National Park (BNP). A study of this sort was unprecedented for a North American national park and was to have impacts both immediately within the bounds of the park and beyond. Why was this study done? Why was it needed? What were the results and impacts?

An examination of the history of the Banff area reveals the confluence of many conflicting interest groups and actors, both human and nonhuman, which have an interest in or use for the Banff-Bow Valley. “National parks are areas of land considered wild, free from the hand of [humans]—that is, they are natural. Yet they are also created by and for people—that is, they are cultural. It is only logical, then, that the tug of war between preservation (the maintenance of the natural component) and use (the relinquishing of the natural to human demands) has been the constant, unresolved problem at the heart of park history” (MacEachern 2001:15). Originally, Banff was intended as a health spa and was purely for “curative” and economic purposes. Park managers and wardens slowly introduced wildlife management for the purpose of conserving game. Now, conservation measures are legitimized mainly by scientific and ecological discourses. It is important to look at these shifts in use and rationales for these

¹ Neighbouring Yoho National Park in British Columbia being the other one.

changes because they tell us how thinking about nature has changed: “In national parks, the cultural and the natural merge, as they do everywhere else. But parks are particularly interesting because they are places where humans believe they have made nature paramount. As such, parks can help us see how nature has been viewed by people. How was this land chosen as a potential park, and by whom?” (MacEachern 2001:5). This project examines Banff National Park as one example of struggles over national park use. What are they for? Who decides how they are managed? The BBVS was a central mechanism for addressing these questions and worked to acknowledge that these are political questions, and the answers to these questions cannot be found in nature but are decided in human society. Although human society dictates national park use and management, “our” decisions have a large impact on the lives of others (i.e. nonhuman nature).

I have chosen to centre my study on the BBVS because it represents a turning point, a crossroads, where Parks Canada’s management of BNP could be drastically changed more so than in past initiatives because of international scrutiny, strong federal interest, and the involvement of interest groups representing opposite poles of opinion. The BBVS addressed directly the issue of park use. The main findings and recommendations of the BBVS demonstrate a shift from a dual mandate in which ecological health of the park and human use and recreation are given relatively equal footing to a mandate which gives precedence to ecological integrity. The BBVS also had the most inclusive and representative public participation process conducted to that point in BNP. The Round Table process, which included representatives of most of the main interest groups in the Banff-Bow Valley, was viewed as an integral part of the study and has been a model for following decision-making processes in BNP.

The specific recommendations made regarding wildlife management have been implemented in some form or another.

In this study I argue that decisions regarding the management of BNP, and specifically its wildlife, have been political, meaning not solely influenced by nature but by other factors, including: changing scientific discourse, historical practices, and public perceptions and attitudes toward nonhuman animals. Science alone cannot provide us with the answers to how “we” should manage national parks. Attitudes have shifted from an anthropocentric, utilitarian view of BNP and its wildlife to one which has changed to include wildlife as vital, if scientized and static, components of the ecosystem. This leads to an examination of nonhuman animals, their functions, behaviour and needs. Recent scientific literature and management emphasizes the movements of nonhuman animals in the park, especially in regards to Trans Canada Highway wildlife crossing structures, and I argue that while many management practices are attempting to redirect nonhuman movement and control human behaviour, management practices need to be even more flexible and accommodating of nonhuman movements.

Several bodies of work have dealt directly with the BBVS, including: democratic decision-making theory (Eyre and Jamal 2006; Jamal 2004; Jamal et al 2002; Jamal 1997; Eyre 1997), tourism studies (Ritchie et al 2002; Ritchie 1999; 1998), and futures modeling (Cornwell 2004). There is also a plethora of research on animal movement in Banff National Park in the scientific literature (see Chapter 5) conducted by Anthony Clevenger, Michael Gibeau, and others. But very little work has been done on the wildlife in Banff in the social sciences. One notable exception is Karen Jones’s *Wolf Mountains* (2002), which traces the history of wolves in several national parks in both the United States and Canada. Other works deal with wildlife management on a larger scale, such as Tina Loo’s *States of Nature* (2006), which examines

wildlife conservation in Canada until 1970. Other works such as Janet Foster's *Working for Wildlife* (1978) and Burnett's *A Passion for Wildlife* (2006) deal with the history of wildlife management by tracing the histories of the origins of a wildlife consciousness in Canada and the Canadian Wildlife Service. Many of the histories of Banff National Park, the Bow Valley, and literature on national parks in general also deal with issues related to wildlife management and conservation and the relationship to development and tourism (Armstrong et al 2009; Kopas 2007; MacEachern 2001, Bella 1987; Lothian 1987). This study engages this work, but seeks to extend it by specifically exploring the topic of wildlife management and movement in Banff National Park, which has been considered mostly as one of many components within the larger context of the park's human history and in the scientific literature. This study provides explanation for the shifts in attitudes and perceptions toward wildlife and accompanying changes in management, which have been gleaned in part from the surrounding literatures. This study also integrates much of the contemporary history and research on the topic, which historical works do not consider.

In the process of research, I used three main methods: archival research, reading and analyzing the reports of the Banff-Bow Valley Study (BBVS), and interviews with some of the key figures of the BBVS. Although the BBVS has been described and discussed in the literatures mentioned above, much time has passed, and this project provides an historical perspective attentive to time and place. Since the study has long been finished, BBVS Task Force interviewees had little fear of saying anything potentially objectionable to the public, interest groups, or Parks Canada. An historical approach has some advantages and allowed research participants to reflect on their experience in light of subsequent events and without the fear of public criticism which they endured during the BBVS process. Archival research was conducted mostly at the archives and library of the Whyte Museum of the Canadian Rockies in

Banff, Alberta. Back issues of the *Banff Crag and Canyon* were used to trace the development and perception of the BBVS from a local point of view. Miscellaneous newsletters, reports, and newspaper articles were also reviewed. Many reports were obtained from the Park Warden library at the office in Banff, Alberta. These included the official reports of the BBVS, reports on the Trans Canada Highway, wildlife movement across the highway, and other related studies and reports. Some additional archival work was conducted at the Yellowstone to Yukon (Y2Y) Conservation Initiative's office in Canmore, Alberta, and at the Canadian Parks and Wilderness Society's (CPAWS) regional office in Calgary, Alberta.

Essentially, this work relies upon many texts: the texts of the archives, the landscape, interviews, reports, and scientific studies. It also relies on works written by others on Banff National Park and the surrounding literature. The process has been to draw upon these texts, comment on them, add my own thoughts, agreeing, disagreeing, and critiquing. Barnes and Duncan (1992:2-3) describe the process of writing within the field of human geography: "Our texts draw upon other texts, that themselves are based on yet different texts and so on. In the vocabulary of literary theory there is only intertextuality, defined as 'the process whereby meaning is produced from text to text rather than, as it were, between text and world.' The consequence is that writing is constitutive, not simply reflective; new worlds are made out of old texts." In this case, the production of an environmental history of Banff National Park, one can discern the history of attitudes toward nature and wildlife through Banff's history: "The environmental historian's job is to observe the aesthetic prejudices and personal interests that tint each text, the better to understand the ways that humans represent nature; once that filter is recognized, the job then entails seeking to create a closer approximation of nature. [...] It means accepting that each description of nature is a mediation between language and real nature"

(MacEachern 2001:12-13). In other words, writing about “nature” is a process involving material reality, ideas about nature, and how the two interact historically.

A Few Notes on Important Terms

This project employs some large, vague terms, which I will define now for clarity. I employ these terms because they are so widely used that it is effectively impossible to discuss Banff, its history and management, without them. The name of the Canadian national park branch, conservation, preservation, wildlife, environmentalist, and developer are among the terms discussed.

The Many Names of Parks Canada

In *Natural Selections*, Alan MacEachern (2001) includes a note on the many names that Canada’s parks agency has held. These many names have to do with how often Canadian Parks were shifted from one branch of government to another. Since 1973, however, Parks Canada has remained Parks Canada.² In 1998, Parks Canada obtained agency status, making it independent from branches that had governed it in the past. This gave Parks Canada a lot of leeway with its funding decisions but also meant that it would have to be more responsible for producing its own funds (Canada 1998).

² It has been named the Dominion Parks Branch (1911-21), the Canadian National Parks Branch (1921-6), the National Parks Branch (1926-36), the Lands, Parks and Forests Branch (1936-47), the Lands and Development Services Branch (1947-50), the Development Services Branch (1950), the National Parks Branch (1953-65), the National and Historic Resources Branch (1966-73), and Parks Canada (1973 on) (MacEachern 2001).

Conservation vs. Preservation

The terms “conservation” and “preservation” have been used interchangeably, but there is a significant difference in meaning between the two, so it is useful to make the distinction clear here. Tina Loo (2006:4) argues: “Except within the boundaries of provincial or federally administered parks where harvesting wildlife was prohibited or restricted only to First Nations, wildlife management policy was directed largely toward the conservation of species, that is, toward initiatives designed to safeguard the long-term survival and health of animals in order to insure their continued use by humans.” *The Dictionary of Human Geography* defines conservation more generally as any form of environmental protection (Johnston et al 2000:106-107). Conservation was first mentioned in relation to BNP with the 1910-1918 Commission of Conservation, which referred more to the maximization of future profit through good, “scientific” management and is the standard definition of conservation (Bella 1987:45). Preservation, on the other hand, means the protection of land without any direct use or benefit to humans (Johnston et al 2000:634).

Wildlife

The term wildlife gets thrown around a lot in many works about wild animals, but it has had different meanings over time. Loo (2006:4) discusses its usage:

For much of the period under study [up to 1970], “wildlife” did not exist. People occasionally used the phrase “wild life,” but referred far more often to “game” and “vermin.” The former were animals or birds that were hunted, worthy objects of pursuit that gave pleasure in the chase. The latter were a motley assortment of creatures that preyed on game or otherwise compromised human interests. [...] It was not until the mid-

twentieth century that the “wildlife service” emerged as a branch of the federal and provincial governments, staffed by “conservation officers. Interestingly, fish were not usually included in wildlife.

This work will refer to all wild animals as wildlife. However, it is important to note that many sources when using this word are referring to terrestrial life, excluding the aquatic, and are more likely than not referring to mammals, specifically larger species.

The term wildlife is also important in relation to the concept of wilderness. A dominant discourse imagines wilderness as a pristine, nonhuman place filled with wildlife. To question this conception of the wild or wilderness is dangerous as William Cronon found when he wrote his classic essay “The Trouble with Wilderness” (1995). Cronon was ruthlessly attacked by environmentalists and by fellow environmental thinkers, who felt that a critique of the political discourses tied up with the wilderness concept would provide ammunition for those who wanted to have less strict control of human activities in wildlands and parks (Whatmore and Thorne 1998:436). Although the idea of nature and culture as distinct spheres has fallen out of favour, the concept of wilderness as pristine nature continues to inform individual and group sentiments and arguments regarding wildlife and parks. Wildlife is viewed as a permanent feature of wilderness and nature, which, therefore, should be left in a pristine, untouched condition. Whatmore and Thorne (1998:450) attempt to pick up where Cronon leaves off—wilderness, they write, is “a place that is hard to imagine, even though (or perhaps because) ‘we’ inhabit it already. How does recognizing the place of the wild on the ‘inside’ of this shared dwelling place raise the moral standing of the animals (and plants) who inhabit this designation?” Chapter 5 directly addresses this question.

“Environmentalists” and “Developers”

One of the unfortunate shortcuts used in the Banff-Bow Valley and the literature concerning it is the simple division of interested groups or individuals into “environmentalists” and “developers.” There is no happy middle ground here. Jamal et al (2002) found that using entrenched categories such as “environmentalist” and “developer” impeded progress in discussions at the BBVS Round Table and in other situations. “A national park must be preserved close to its natural state and also provide for visitors. This implies a conflict between preservation and use. In a capitalist economy national parks have to combine profit from tourism with preservation from human impact” (Bella 1987:1). In reality, there is no harsh division between “environmentalists” and “developers,” but the perception that there is has created tensions and a divide. This will be explored later on (see Chapter 3 particularly). I sometimes use these terms as shorthand to describe tensions in the Banff-Bow Valley and because they are used in other texts to describe the stakeholders.

A Map of What is to Come

Chapter 2 explores the origins of Banff National Park and the shape that wildlife management took in the early years of park development. Beginning with the construction of the Canadian Pacific Railway in the 1880s, the Banff town site, the reservation of land for scenery and then for a national park, and the construction of Trans Canada Highway have all had a lasting impact on the landscape. The US national parks had a similar beginning, although one of the main impetuses, the desire for national monuments, was not as central for the Canadian system. BNP was often at the centre of conflict between environmentalists and developers, which helped to shape what sorts of activities would be allowed within national parks. Initially, parks were meant solely for recreational, health and economic purposes because of the focus on

the Banff Springs. However, increasingly, the management focus shifted to also include the scenery and game and eventually to an ecological view of the park and its wildlife. Nonhuman animals went from being “game” or “noxious pests” to vital parts of the ecosystem, their dynamic movements and needs being acknowledged. Conflicts between environmental and

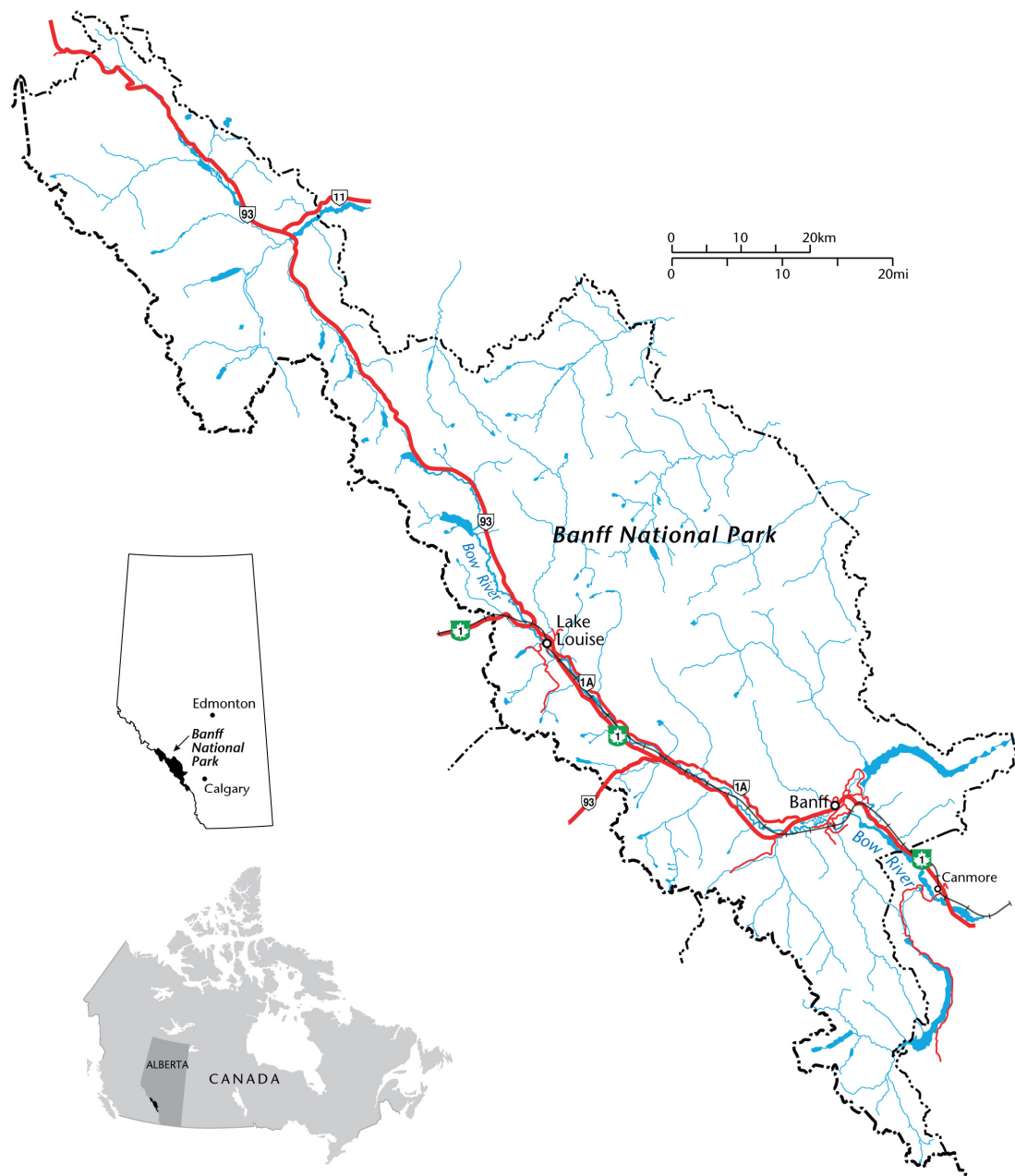


Figure 1.1: Banff National Park (Drawn by Eric Leinberger)

development interest groups began with the proposed damming of Lake Minnewanka and the Spray Lakes in the 1920s, were renewed with proposals to host the Olympics in BNP in the 1960s and 1970s, and have continued until the present day. Poor Parks Canada public relations exacerbated these conflicts especially from the 1960s onwards. The issue of public participation became an important issue in and of itself with the Four Mountain Parks Planning Program in the mid-1980s and the Banff-Bow Valley Study in the mid-1990s.

Chapter 3 continues to trace the story of conflict in the Banff-Bow Valley as it came to a head. Environmental groups claimed that the World Heritage status of Banff would be revoked if the Trans Canada Highway lanes were doubled from two to four within the park. Amid this controversy, Minister of Heritage Michel Dupuy announced the Banff-Bow Valley Study (BBVS) as a response to the growing tensions in the valley and to see whether the development was threatening the ecosystem as suggested by environmental interests. The study process was uncertain. Dupuy and others chose five people from academia and industry to form a Task Force independent of Parks Canada to craft and carry out the study, which would develop a vision for the future of the Banff-Bow Valley, determine goals and provide management directions. Dupuy gave the Task Force two years and over two million dollars to complete the study. It was uncertain for the members how the study should proceed, and they looked to other processes for inspiration. One of the most influential aspects of the study was the Round Table process, which allowed 16 interest groups in the valley to discuss their interests and find common ground with one another and for a time overcame some of the hostility between the entrenched groups of “environmentalists” and “developers.” The media played an important role during the BBVS and particularly in the Round Table process, often by exacerbating conflicts between groups. After a labour-intensive process, the Task Force finished its report in October 1996. Their main

finding was that overdevelopment in Banff was indeed harming ecological integrity and that major changes needed to be made in management.

Chapter 4 examines the reaction and response to the BBVS and its approximately 500 recommendations. The new Minister of Canadian Heritage Sheila Copps responded immediately by enacting around 10% of the recommendations, including some major changes such as the removal of structures on the north side of the TCH. She also created an implementation committee to determine the feasibility of the recommendations and which ones should be implemented. Parks Canada also responded strongly to the BBVS report and included many of its recommendations in the 1997 Banff National Park Management Plan. Parks Canada also included the priorities of the BBVS, in the 2001 National Parks Act, which emphasized the maintenance of ecological integrity as the primary mandate of the agency. This change came about from the Panel on Ecological Integrity, inaugurated by Minister Sheila Copps soon after the completion of the BBVS, who wanted an evaluation of ecological integrity across the Canadian national parks system. While this initial response seemed strong and promising for environmentalists, interest groups challenged specific recommendations that threatened their activities. Groups such as anglers, those who wanted to continue to use the Bow Valley Parkway, pilots, and others took offense and campaigned against the recommendations and in some cases won. The BBVS did not resolve all of the conflicts in the Banff-Bow Valley. Rather, it mitigated some of the stubbornness that interest groups had against talking with one another. Interest groups are always negotiating and renegotiating what counts as appropriate human use in the park. Overall, the BBVS and the focus on ecological integrity encouraged thinking about BNP and its wildlife in a regional context and an ecological framework.

Chapter 5 looks into the issues of wildlife movement, wildlife corridors, the Trans-Canada Highway and its mitigations that allow for wildlife passage across the highway. I explore what the wildlife-human relationship entails in BNP and what it perhaps should be. This chapter draws upon and discusses several important works from nonhuman geographies and related areas including: David Hulka's "ethics of movement," Donna Haraway's companion species theory, Henry Buller's discussion of biosecurity and biodiversity, Sarah Whatmore's work on wildlife, and William Adams' critique of a static, equilibrial nature. Drawing upon this literature and the example of wildlife movement in Banff, I conclude that management, while quite reflexive, needs to reflect and respond to the dynamic nature of nonhuman nature.

Chapter 2: Banff: A History of Development, a History of Environmental Conflict— from the Creation of Banff National Park to the 1990s

Introduction³

Throughout its history, Banff National Park (BNP) has been at the centre of a conflict between development and conservation and between humans and nonhumans. Initially, the creation of Banff National Park was very much an economic and recreational endeavour. Canadian Pacific Railways employees discovered the Banff Springs first, and then in 1885 the federal government created a reserve to protect them from commercial exploitation. The transportation corridor preceded the creation of the park and drastically altered important corridors for wildlife movement through the narrow Bow Valley and brought settlement, industry, tourism, hunting and conservation. The initial interest in the Banff-Bow Valley was entirely utilitarian, but a conservationist approach developed from concerns about game and fish populations, and policy and management gradually reflected these concerns. From the 1930 National Parks Act forward Parks Canada policy contained a tension in its dual mandate of human use and enjoyment and the goal of leaving parks “unimpaired for future generations.” The issue of environment versus development, in the entrenched version that we are familiar with today, only came about from a series of conflicts over human use in the 1960s and 1970s with three bids for the Olympic games to be held in Banff and a controversial development plan for Village Lake Louise. Parks Canada lost credibility with both sides of these debates as a

³ This project excludes the earlier history of the Banff-Bow Valley region for sake of brevity. For a discussion of earlier history, see: E.J. Hart. *The Place of Bows: exploring the heritage of the Banff-Bow Valley—Part 1 to 1930*. EJH Literary Enterprises Ltd.: Banff, 1999. For information about wildlife populations in the Canadian Rocky Mountains 1800-1870, gleaned from the accounts of explorers, read: Charles E. Kay et al. “Historical Wildlife Observations in the Canadian Rockies: Implications for Ecological Integrity.” *Canadian Field-Naturalist* 114 (4) Oct-Dec 2000: 561-583.

result of inaction and poor communication with the public, and future interactions with the public suffered substantially. This increasing division between environmentalists and developers coincides with a focus on the ecosystem as opposed to nature, and wildlife instead of game.

Part of the creation of management plans for the park required public consultation. Foremost among these processes was the Four Mountain Parks Planning Programme conducted in the mid-1980s. This program aimed to include public opinion in the management of BNP through written responses to three proposed management directions but failed to engage public audiences. Many citizens and environmentalists felt as a result that their concerns were not being heard, and it charged that businesspeople could go straight to Ottawa to have their issues addressed by politicians. Although Parks Canada policy pursued environmental concerns, implementation was another matter. This chapter will trace the trajectory of the “environmentalist” versus “development” conflict in some more detail along with the parallel and intertwining story of wildlife management and the changes and movements of the wildlife populations up to the early 1990s.

Banff National Park Origins to 1930: The Management of Fish and Game

Although the story of Banff’s origins is one that has been told many times, a brief overview is necessary here to understand how Banff has come to its present state.⁴ The story of Banff National Park is closely tied to the Canadian Pacific Railway (CPR). As one of the conditions of British Columbia’s admittance into the Dominion in 1871, Canada would begin the construction of a transcontinental railway within two years, and it was to be completed in ten

⁴ For an exhaustive history of Banff National Park, read: Great Plains Research Consultants, *Banff National Park, 1792-1965: A History*, Prepared for Parks Canada, 1984, for an administrative history. See also: W.F. Lothian, *A Brief History of Canada’s National Parks*, Environment Canada, Parks Canada: Ottawa, 1987, and W.F. Lothian, *A History of Canada’s National Parks*, Indian and Northern Affairs, Parks Canada: Ottawa, 1976.

(Lothian 1987:13). The government of Canada did not have the resources to complete the railway and passed along the construction of the railways in 1881 to the syndicate, the Canadian Pacific Railway Company, which completed the line in 1885 (Lothian 1987:14). From the beginning CPR owner “Van Horne wanted to control development in the mountain valleys, to protect the scenery from squatting and enable the CPR to monopolize development” (Bella 1987:10). In August 1883 three CPR workers, W.M. McCardell, Thomas E. McCardell and Frank McCabe, stumbled upon hot springs at Sulphur (then called Terrace) Mountain, and quickly, others came and laid claims on the area as well. This led to disputes between the various claimants (Lothian 1987:15-16). The CPR saw the economic possibilities in the western territories of Canada and intended to gain control early. The discovery of hot springs in the Canadian Rocky Mountains near the transcontinental rail line potentially gave the CPR a perfect tourist destination.

Both the CPR and the Canadian federal government wanted to create a reserve for the hot springs, and this idea was not novel. The CPR and the Canadian government had the American example to follow: “The development of national parks and protected areas in Canada has more or less paralleled that in the US. Many of the early Canadian national parks were created in remote places for geologic, scenic, tourism and later for biological and ecological reasons” (Nelson 1998:281). The United States set the national parks precedent with the 1864 Yosemite Act and the creation of Yellowstone National Park in 1872 in Wyoming, which was centred around geysers and other notable geologic features.⁵ Canadian officials followed the development of the American parks system. Roderick Nash (2001:108) describes the beginnings of Yellowstone and the motives behind its creation:

⁵ There are a number of striking similarities between the origins of national parks in the United States and Canada, including the geologic features, which inspired their preservation, and the support of national railroad companies hoping to capitalize from tourism.

Yellowstone's initial advocates were not concerned with wilderness; they acted to prevent private acquisition and exploitation of geysers, hot springs, waterfalls, and similar curiosities. In New York the decisive argument concerned the necessity of forested land for an adequate water supply. In both places wilderness was preserved unintentionally. Only later did a few persons begin to realize that one of the most significant results of the establishment of the first national and state parks had been the preservation of wilderness.

US legislators did not create Yosemite or Yellowstone because of environmental values, but for a number of political reasons, prominently the creation of natural monuments for the United States from its wilderness to compete with the cultural monuments of Europe (Runte 1979; Kopas 2007:24-27). By late summer 1885, the Department of the Interior in Ottawa was seriously considering protecting the hot springs from private development and this was done on November 25, 1885:

His Excellency by and with the advice of the Queen's Privy Council for Canada has been pleased to order, and it 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 and in their immediate neighbourhood, be and they are hereby reserved from sale or settlement or squatting [...]. (qtd. in Lothian 1987:17).

Legislators who were considering the creation of a reserve were not interested in creating a national monument for Canada like the United States had with Yellowstone, but rather were interested in creating a health spa reserved for elite visitors, so that it would not be tainted by

unrestrained capitalist endeavours (Armstrong et al 2009:273-274; Jones 2002:110). A report to the Department of the Interior in 1886 described the “remarkable curative properties of these waters” (qtd. in Lothian 1987:20). Again, the Canadian government turned to the United States for guidance by examining the case of the Arkansas hot springs, which had been reserved by the American government in 1832. In 1886 John R. Hall, Secretary of the Department was sent to Arkansas. He reported on the private business, which ran the commercial activity at the hot springs, as poorly-operated, and the bath-house facilities were in bad condition. The Department of the Interior hoped to learn from these failings for the operation of the Banff Springs (Lothian 1987:20-21). The hot springs began to draw people and development, such as roads, businesses and hotels. At the same time Canadian legislators set aside 26 km² around the hot springs for the conservation of the scenery (Lothian 1987:21). Kopas (2007:28) argues that Banff was not meant to be a nature preserve or wilderness park at all because Sir John A. MacDonald spoke of Banff in terms of its uses and the need “to improve on it to a certain extent.” “Many of the Parks Branch’s decisions were made in an attempt to maintain the parks as symbols of high culture. Beginning at Banff in 1885, national parks had always been resorts catering to wealthy tourists from Canada and elsewhere. Parks were sold as epitomizing fine attributes such as a taste for beauty, a love for nature, and national pride” (MacEachern 2001:6). Banff National Park remained largely an elite destination until the proliferation of automobiles and their easy access to the park with the construction of the Trans Canada Highway parallel to the CPR later in the 1960s.



Figure 2.1: The Canadian Pacific Railway has a negative impact on wildlife. It bisects populations and leads to mortalities when grain spilled on the railway draws animals onto the tracks. This continues to be an issue. (Photo by author)

As legislation protecting Banff went into effect and tourism was emphasized, there was little done to alleviate the environmental effects of the CPR construction through the valley, which included fires in the forests and negative impacts on wildlife. Many railroad workers hunted for subsistence and pleasure, and with approximately 12,000 people working in the mountains to construct the railroad, the impact must have been great (Hart 1999:89-90). Early on, wildlife seemed to be at risk. In 1886 the Minister of the Interior commissioned W.F. Whitcher to do a study of flora and fauna in the park. Whitcher reported: “Paucity of fish and game will undoubtedly deprive the National Park of something of its many wild attractions; whilst plenteousness in its development as a free popular resort for health and recreation as also to strangers attracted thither by the natural features of scenic beauty and hygienic excellence

which it assuredly embodies in an eminent degree” (qtd. in Great Plains Research Consultants 1984:72).

Banff National Park (known as the Rocky Mountains Park until 1930) was officially introduced in the House of Commons on April 22, 1887, and the Rocky Mountains Park Act received final approval on June 23, 1887⁶:

2. The said tract of land is hereby reserved and set apart as a public park and pleasure ground for the benefit, advantage and enjoyment of the people of Canada, subject to the provisions of this Act and the regulations hereinafter mentioned, and shall be known as the Rocky Mountains Park of Canada. (qtd. in Lothian 1987:23)

Any push for conservation or protection of the environment tended to be for human purposes: “Even the government’s policy on wildlife in the park seemed a response to the perceived need of the tourist” (Great Plain Research Consultants 1984: 72). Janet Foster (1978:23) corroborates this view: “Obviously, as revealed in the original order-in-council, the Commons debates, and the Rocky Mountains Parks Act itself, park policy was commercial exploitation under the guise of ‘usefulness’ and ‘utility’.” This “doctrine of utility,” a term coined by Robert Craig Brown, has been a dominant narrative of BNP and other national parks. MacEachern (1995:14-19) challenges this idea. “In such histories, the doctrine of usefulness is itself useful in a narrative sense: it allows the parks to begin as instruments of capitalism until redeemed by the grassroots efforts of environmentalists” (MacEachern 2001:16). MacEachern believes rather that an examination of the “constant struggle between preservation and use” would be a more productive

⁶ Soon after the creation of the park, native groups were forcibly removed and excluded from the park. They were forbidden to hunt and were blamed for the depletion of game animals, while at the same time, the park was increasingly managed for sportsmen, who in combination with the detrimental environmental impact of the CPR were the real cause of most lost game. For a good discussion of this phenomenon, see: Theodore (Ted) Binnema and Melanie Niemi, “‘Let the Line Be Drawn Now’: Wilderness, Conservation, and the Exclusion of Aboriginal People from Banff National Park in Canada.” *Environmental History* 11: October 2006, 724-750.

avenue of thought. “Ultimately, the national park system cannot be interpreted in terms of only a doctrine of usefulness or a doctrine of preservation, because the Parks Branch has been expected to fulfill the mandates of both use and preservation simultaneously” (MacEachern 2001:18). During Banff’s infancy the park managers viewed and managed it as a health resort and spa for elite tourists, but in order to do this, landscape and scenery were preserved. The aims of use and preservation do not always contradict each other, but they both changed over time, and the dynamic between preservation and use continues to change.



Figure 2.2: Bow Falls and the Banff Springs Hotel, one of the first major developments in Banff. (Photo by author)

There was no environmental consciousness when Parliament created Canada’s first national park around the hot springs in 1887. The park regulations created in 1889 did take conservation of forests and game into account and had some controls on development, but the main impetus was for developing a resort area. The Banff Springs Hotel, built by the CPR and completed in 1888, was one of the first major structures within the park. After an initial

whirlwind of development, projects dwindled in number. In the first few years of its existence the park did not have wardens, and natural fires within the park and those along the rail line caused by cinders from locomotives, from visitors and settlers were troublesome for residents and depleted wildlife populations (Lothian 1987:23-25; Binnema and Niemi 2006:728; Pyne 2007:184). Banff would not exist as it does today without the presence and influence of the CPR. In fact, the park was accessible only by the CPR line for the first 25 years of its existence. The CPR brought tourists, built many of the larger accommodations and advertised the Rocky Mountains heavily (Lothian 1987:32). The settlements of Canmore and Banff grew up along the rail line (White and Hart 2007:2).

Early on park managers recognized the importance of maintaining wildlife, but mostly in terms of its usefulness, economically. In 1886 the Minister of the Interior sent William F. Whitcher to Banff to study the flora and fauna with the purpose of making recommendations on how best to manage them for the benefit of tourists but also for the provision of wild meat for residents. He approved of the game laws already in place, but he advised that more guardians for the game be hired because of a rumour that some American hunters were planning on coming to the area (Colpitts 2002:77; Lothian 1987:25). Whitcher also recommended that predators and other pests be destroyed to allow game to thrive. This policy did not last long, and an Order-in-Council of 1890 prohibited the killing of animals in the park excepting the removal of “troublesome” animals (Burnett 2003:7). The issue of predators is tricky because the definition of “predator” is constantly in flux: “Historically, they [predators] have been whatever animals people have *considered* to be predators—in other words, animals whose feeding habits in some way compete with human interests” (MacEachern 1995:198). MacEachern (1995:199) counters historian Thomas Dunlap’s claim (1991; 1990) that national parks in both Canada and the United

States helped to change the attitude towards predatory animals: “Science was less an ultimate objective arbitrator in the making of predator policy than it was a tactic, a language used to defend what were still quite human positions.” A few factors demonstrated that attitudes toward predators had not changed within the national parks in the 1950s: parks staff continued to follow the biological thinking of livestock owners and hunters; science allowed managers to think about animals in terms of units instead of individuals, allowing them to conduct ethically questionable experiments on animals; and entrenched attitudes about predators persisted (MacEachern 1995:199). Jones (2002:112-113) points out that one place where predators were welcomed was the Banff Park Museum, built in 1895: “Animals prohibited from existence in the material landscape were allowed to roam the glass cases unmolested. [...] The Banff Park Museum embodied Victorian pursuits of nature collection and taxidermy, cataloguing flora and fauna and preserving them for posterity in clinical museum habitats.” Taxidermists placed animals like wolves in aggressive positions and shaped their faces into snarls, while game animals like deer appeared wide-eyed and sweet.

Howard Douglas, who became the second superintendent of Banff in September 1897, did much to promote wildlife populations in the park and used heavy-handed management practices to encourage their presence for the benefit of tourists. He wrote of his approval of three bison, which had been brought into the park and put in a paddock near Cascade Mountain because of their popularity with tourists. George Stewart, the first superintendent of Banff, had installed a zoo, which included: 30 bison, elk, Rocky Mountain sheep, moose, deer, antelope, Angora goats, and yak. Douglas wished to expand the boundaries of the park to preserve fish and game populations (Great Plains Research Consultants 1984:88, 112-113; Foster 1978:56-57).

Other species were later added to the zoo.⁷ Douglas continued to develop the zoo because he realized that many visitors wanted to see wild animals during their visit to the park. Burnett (2003:7) cites him as an early supporter of “ecotourism.” This is a neologism since ecological values as we know them did not gain a foothold in Banff’s management until much later in the 1960s and 1970s and more officially in the late 1980s. Also, it is important to consider whether zoos are ecotourism in any case. Fennell (1999:43) defines ecotourism as “a sustainable form of natural resource-based tourism that focuses primarily on experiencing and learning about nature, and which is ethically managed to be low-impact, non-consumptive, and locally oriented (control, benefits, and scale). It typically occurs in natural areas, and should contribute to the conservation or preservation of such areas.” The Banff zoo was perhaps educational in that visitors were able to observe animals, but it was not a purely local venture. Perhaps, Douglas was concerned that tourists would not get the chance to observe the creatures that one could see in BNP, but then why have animals like polar bears, pelicans, and ringtail monkeys? Calling the Banff zoo a sort of proto-ecotourism simply does not fit and is a misuse of the term. However, Burnett is correct to draw attention to the Banff zoo as something unique and bizarre. Jones (2002:113) also notes the strangeness of the zoo⁸: “Animals were popular curiosities to marvelling onlookers, who paid scarce heed to the unnaturalness of the caged habitats. Most of the inmates were ex-inhabitants of the park who had been captured and relocated. Exotic animals, however, were the most loved creatures in the zoo.” Predators like wolves were also among the more popular animals (Jones 2002:113). Philo and Wilbert (2000:13) identify the

⁷These included: pheasants, black bears, brown bears, grizzlies, red foxes, kit foxes, timber wolves, lynx, marmots, coyotes, cougars, badgers, martens, porcupines, gophers, fox squirrels, black squirrels, Canada geese, hawks, golden eagles, bald-headed eagles, owls, pelicans, ringtail monkeys, rhesus monkeys, polar bears, raccoons, and orange squirrels (Great Plains Consultants 1984:112-113).

⁸ In 1938, park officials recognized the Banff zoo as an anomaly and found new homes for many of the animals, mostly at the Calgary Zoo (Jones 2002:122).

objectives of zoos “to translate wild animals *from* ‘the wilderness’ *to* the special, enclosed enclaves nearer to our human homes in ‘the city.’” The Banff zoo is unique perhaps because it is a space for humans to view wildlife not ‘in the city’ but rather in a place considered wilderness. It seemed to have been there purely for the purpose of spectacle, to draw curious tourists. To ascribe ecological values at all is a large assumption to make, and to ascribe these values to the creation of a zoo makes less sense. Douglas certainly was interested in the conservation of local animals, but he was just as interested in tourism dollars for the park. Douglas went on to purchase 703 Plains Bison in 1911 to be placed in a paddock in the park (Burnett 2003:7). He viewed this as money well spent:

I consider the money spent in looking after and maintaining them [the species kept in the paddock], as well as any additional money that may be spent in rendering Banff more attractive as a place of call for the travelling public by procuring other animals that are indigenous to our country and climate...will prove not only a present but permanent valuable investment, and add to the wealth of the Dominion generally. (qtd. in Foster 1978:57)

The protection of game and fish populations was a serious matter; Douglas heard from police patrolling around the park that game animals were quickly disappearing. He wanted to expand the park’s boundaries for the purpose of preserving populations, but his immediate attempts were not fruitful (Foster 1978:56-58)

Around the turn of the century there was broad support for the expansion of the park to accommodate visitors and game (Lothian 1987:32). In 1901, legislation enlarged the park to 11,396 km², which included Lake Louise. Lake Louise, a site 53 km northwest of Banff and the surrounding 132 km² was first reserved as part of the forest park in 1892. The CPR had already

seen the possibility of the beautiful lake and scenery as a tourist destination and built a chalet there in 1890, which was destroyed two years later and then rebuilt and expanded. The Lake Louise reserve was incorporated into the park in 1902 (Lothian 1987:27). Lake Louise would go on to become a major tourist service and recreational centre and played an important role in the story of development in BNP. On May 11, 1911, the Dominion Forest Reserves and Parks Act replaced the Rocky Mountains Park Act, and soon after J.B. Harkin became the first Parks Commissioner (Lothian 1987:33). The Act also established a separate agency, the Dominion Parks Branch, to administer the park separately from forestry and other resource sectors. This was the first parks agency in the world, preceding the creation of a United States branch by five years (Kopas 2007:29). Harkin accomplished much during his 25 years as Parks Commissioner, and he was known for promoting the national parks as a “playground” for Canadians. “The national parks thus had to fill a vital and important role: to offer facilities for wholesome recreation that would physically and spiritually rejuvenate the Canadian people by building up their play instinct” (Foster 1978:81). While Harkin was mostly concerned with enhancing the tourist experience, he was also concerned with game insofar as they affected that experience, and he did what was possible to conserve them. Harkin ordered a study to be done on wildlife populations in the park⁹, and most of the species were thriving in numbers. Interestingly, the resulting report suggested that the flight paths of migratory birds had been altered significantly by the installation of coking ovens in the Crowsnest Pass area. Wildlife considered “pests” or “noxious” continued to be destroyed, including hawks and coyotes (Great Plains Research Consultants 1984:146). The Fire and Game Guardians (formed in 1909)

⁹ Foster (1978) and others credit Harkin with efforts to conserve wilderness and wildlife, but MacEachern (1995:199) argues that Harkin’s assistant F.H.H. Williamson and possibly Hoyes Lloyd, the supervisor of Wild Life Protection in Canada, wrote most of the conservationist policies and statements.

patrolled the park and were responsible for enforcing the hunting prohibition and to kill “pests” (Jones 2002:115).

By the mid-1920s wildlife and predator policy changed, but attitudes toward predators remained the same. In 1924, at the recommendation of Hoyes Lloyd, the supervisor of Wild Life Protection in Canada, Harkin had park superintendents conduct a review of which animals they killed and the reasons why. The results were very similar to Whitcher’s 1886 report. Harkin pared down the list of predators to: wolves, wolverines, coyotes, mountain lions, lynxes, goshawks, Cooper’s hawks, great horned owls, crows, and magpies (MacEachern 1995:201-202). Harkin also instructed that the park superintendents must at “all times exercise the best judgment with a view to protecting the public and at the same time see that there will be enough of non-dangerous bears to provide the thrill that tourists get from seeing live bears in the open” (qtd. in Great Plains Research Consultants 1984:186). Parks also began to educate people with lectures and posters about the danger that wild animals posed (Great Plains Research Consultants 1984:186). In 1923 there was a controversy in the town of Banff when there was a rash of deer attacking children, scaring adults, and damaging property. Norman Luxton, the editor of the local newspaper, wanted to restrict wild animals from the town site, but the superintendent disagreed with him, claiming that the real problem was the indiscreet feeding of wild animals, causing them to become habituated to human presence and associating humans with the presence of food. Another problem was that wardens had been allowed to keep the pelts of animals killed in the process of their work, leading to unnecessary killings. This policy therefore was put to an end (Great Plains Research Consultants 1984:187-188).¹⁰ Although Harkin put an end to this

¹⁰ The management of controlling wildlife in national parks (i.e. the killing of predators to increase game) is mirrored by similar management practices, which suppressed wildfires and fires caused by natives, trappers, explorers and transients in the park because of a fear of damaging structures in the park or the scenery. For

practice, wardens were still expected to control predator populations. In 1929 he wrote: “Wildlife is given absolute protection with the further exception that war is waged on predatory animals to a reasonable extent in order that the safety of the remainder may be made more secure” (qtd. in MacEachern 1995:202-203). MacEachern makes an important note here: predators and other wildlife were free to move in and out of the park boundaries. Therefore, park policies that drove away predators affected wildlife outside of the park, too (MacEachern 1995:203). Lloyd unsuccessfully attempted to change Harkin’s predator policy. In 1937 Harkin’s assistant F.H.H. Williamson became head of the national parks and changed predator policy, demanded strict scientific evidence for policies and expressed regret for previous policies. However, wardens practiced contradictory wildlife management for several years to come, culling wildlife populations and then turning around to make sure that visitors did not hunt within park borders (MacEachern 1995:205-207). At the 1940 Superintendents Conference it was announced that, “there should be no black list against any animals in the park, except in certain circumstances, and that the instructions permitting the wardens to kill as many as he can should be rescinded” (qtd. in Jones 2002:123). Tina Loo (2006:212-213) argues that predator control policy was a part of a larger interventionist impulse during the first hundred years after Confederation and that this impulse was strongest in Canada’s western national parks. Government management shifted from controlling the harvest of wildlife to actively managing the populations of wildlife species to increase the number of game animals. Loo cites the

background on the history of fire in Canada, see: Stephen J. Pyne. *Awful Splendour: A Fire History of Canada*. UBC Press: Vancouver and Toronto, 2007. See especially pages 182-186. For example, Pyne quotes Superintendent, who wrote in his first report on the park that “in past years forest fires have ravished portions of the Park and left spots of desolation and extensive bands of dead timber, disfiguring the beauty of certain tracts” (2007:183). See also; Stephen J. Pyne. “Burning Banff.” *Interdisciplinary Studies in Literature and Environment* 2004 11(2):221-248.

poisoning of wolves to increase bison numbers and then the killing of bison when their numbers became too large as one of the most extreme examples of the interventionist impulse.

During the 1930s provincial officials sought places to rear fish from the Banff hatchery that had been established in 1913 and decided on the Kananaskis Lakes as a possible site. They hired Donald S. Rawson, a University of Saskatchewan fisheries biologist, to determine whether this was a wise choice. Rawson was a specialist in lake ecology and studied the productivity of the lakes (Armstrong et al 2009:230-231). He conducted his study in 1936 and 1937 and concluded that fish could not be reared at the site. Angling was suffering except in the most remote areas because of abnormally low populations of fish.¹¹ The report suggested that the hydroelectric development in Lake Minnewanka was one reason for low fish numbers, and Rawson recommended that more remote areas be advertised to relieve pressure from other areas.¹² The Parks Bureau also inaugurated a fishing license program to control further angling in the park, a move that was not popular with the public (Great Plains Research Consultants 1984:228-230; Burnett 2003:19). Fish management continued in the next few decades with the introduction of Atlantic Salmon to Lake Minnewanka, and the Splake, a hybrid of Lake Trout and Speckled Trout reproduced quickly to restock many lakes in the mountain parks (Burnett 2003:137).

While the CPR had a huge impact on the Banff-Bow Valley, roads, especially the Trans Canada Highway, have also had huge consequences for the Valley. Roads were originally banned within BNP, but automobile tourism changed that, and by 1915 all restrictions were

¹¹ A fish hatchery had already been installed in Banff since 1913 (Burnett 2003:133).

¹² Colpitts (2002:140) also mentions the problem of scarcity. Howard Douglas, the parks commissioner in 1897 discovered from a British angler that miners were fishing for subsistence by using dynamite, spears and nets. When COR officials heard about this, they panicked and sent fish from Nipigon, Ontario to be placed in the Bow River.

lifted (White and Hart 2007:43). Harkin commented in 1914: “What motorist will be able to resist the call of the Canadian Rockies when it is known that he can travel through them on first class roads? And what a revenue this country will obtain when thousands of automobiles are traversing the parks” (qtd. in White and Hart 2007:130). The automobile contributed to the growth and accessibility of national parks (Lothian 1987:32). Throughout the 1920s and 1930s roads were built in the region connecting BNP to Calgary, British Columbia, Field, BC, and Jasper. The idea of expanding the Trans Canada Highway through BNP appeared as early as the 1940s because of numerous complaints about the state of the roads in the park and the fact that more trucks and tourists were utilizing the park’s roads. The Trans Canada Highway construction was completed throughout the 1950s and came through Banff in 1958, which led to an increase in the numbers of visitors (Lothian 1987:35). An increase in visitor numbers caused growth in the hotel and campgrounds (Lothian 1987:36):

With the advent of the automobile, the railroad’s monopoly on passenger transportation would end. But fifty years of favoured treatment by governments had allowed the Canadian Pacific Railroad, and to a lesser extent Canadian National, to build on the best sites, to finance the best facilities, and to control their businesses and physical environment. (Bella 1987:24)

Within a few decades the Banff-Bow Valley went from being a place only visited seasonally by native hunters and occasionally by white explorers to a place that had been taken over by the CPR’s commercial interests. Although travel came to be dominated by automobiles and roads, the CPR continued to control many important developments and assets within the park. During the early years of the park’s history, the main conflict was not one between conservation and

development. Rather the main question concerned whether or not industrial activity would be allowed within the park's borders.

One of the first major conflicts over human use in Banff National Park occurred over the 1923 proposal to dam the Spray Lakes for hydroelectric development, which Bella (1987) states prompted the first of two main conservation movements in the park.¹³ The potential damming of Lake Minnewanka was a controversial topic at the time as well. Calgary Power considered Lake Minnewanka an attractive spot for the building of a large reservoir. Calgary Power built a small dam at Lake Minnewanka in 1912, but it did not produce as much power as expected. In 1921 engineers proposed to scrap this dam and replace it with one that would raise the lake's level by 30 feet to supply power to a proposed generating plant on the Bow River next to Anthracite. Parks officials and Interior minister Charles Stewart rejected the plan because of the detrimental impact it would have on scenery and tourism as a result. Tourists regularly visited the lake because of its proximity to the town of Banff, only 10 km away. Calgary Power then turned its attention to the Spray Lakes as a second choice (Armstrong et al 2009:128-132). In response to the 1923 proposal to dam the Spray Lakes, the Alpine Club of Canada¹⁴ formed a second group, the Canadian National Parks Association "with objects consisting of the conservation of the Canadian National Parks for scientific, recreational and scenic purposes and their protection from exploitation for commercial purposes" (qtd. in Bella 1987:51). This new group fought to defeat the proposal. In the end, parks officials and legislators allowed the damming of Spray Lakes to continue but only outside of the park's boundaries. The new National Parks Act of

¹³ Bella (1987) cites the controversy over the proposed ski developments in Village Lake Louise in 1972 as the second major conservation movement in Banff National Park. See below for further discussion.

¹⁴ For an early history of the Alpine Club of Canada, see PearlAnn Reichwein's "At the Foot of the Mountain: Preliminary Thoughts on the Alpine Club of Canada, 1906-1950." In *Changing Parks :The History x, Future, and Cultural Context of Parks and Heritage Landscapes*. Edited by John S. Marsh and Bruce W. Hodgins. Toronto: Natural Heritage/Natural History Inc., 1998.

1930 prohibited industrial activities in the parks, but redrew the lines of Banff National Park to allow areas of industrial development such as Spray Lakes (closer to the border of the park and more easily cut out of park plans than Lake Minnewanka, mining in Canmore and a cement plant in Exshaw to continue their operations (Bella 1987:57-58). However, all of these manoeuvres and compromises occurred before the war. In 1940 when demand for power was high and Calgary Power had to produce 26,000 horsepower annually to a new plant in Calgary, Calgary Power turned again to Lake Minnewanka, this time with a proposal for a 60-foot dam. Parks officials resisted the proposal and suggested options outside of the park, which were shot down for various reasons related to a lack of time or specific resources. However, Calgary Power constructed the dam despite the reservations of park officials (Armstrong et al 2009:137-139).

The discussion of preservation and human use began early in the park's history. As early as 1925 parks policy clearly expressed its interest in preserving the environment for the purpose of human enjoyment:

Broadly speaking the purpose of National Parks is to serve the people of Canada. While the preservation of the original wilderness has been the fundamental idea, it has been recognized the parks cannot serve the public unless they can be visited in safety and comfort. This has forced the construction of roads and trails throughout the parks.

However, in all construction work of this kind everything has been carried on with a view to making as little change as possible in the original appearance and character of the park (qtd. in Hart 2005:5).

With the 1930s and the official designation of Banff as a national park in 1930, conservationist values, if somewhat vague, were infused into the language of park policy.

1930-1960s

Following the 1930 National Parks Act, the approval of Parliament was required for any new major development in the park (Hart 2005:5). The 1930 Act prohibited industrial activities within national park boundaries as part of the concept of “inviability,” meaning that the natural environment should remain unimpaired from industrial development. Instead of removing industrial pursuits from the park, the 1930 National Parks Act altered the BNP border to maintain this concept of the national park and exclude the settlements of Canmore and Exshaw¹⁵ (White and Hart 2007:23). Mining had also occurred in Bankhead and Anthracite, both within the borders of the park, but these were later removed in the 1920s (Bella 1987:26-32). Park officials did not allow the damming of Lake Minnewanka, and this played an important role in the passage of the 1930 National Parks Act (White and Hart 2007:67). The last change in the park’s boundaries was made in 1949 to exclude the Spray Lakes Reservoir, leaving the total area of the park at 6,641 km². The 1930 National Parks Act also changed the name of the park¹⁶ to “Banff,” which had been in use since 1888 as the railway station stop within the park. It was named after the Scottish hometown of one of the CPR directors, Sir Donald Smith (Lothian 1987: 33).

¹⁵ Leslie Bella provides a history of economic ventures in Canadian national parks in *Parks for Profit*, Montreal: Harvest House Limited, 1987. Great Plains Consultants (1984:102) makes the point that the CPR made not only Banff and the other national parks a possibility, but it also made the industrial pursuits possible (i.e. transportation of raw materials out of the Rocky Mountains) that threatened the existence and integrity of these parks. This history goes on to give an overview of various, ephemeral industrial communities that existed within and around the park. Runte (1979) also discusses the impact of industry on national parks in the United States. Any commercially profitable lands (i.e. those suitable for lumbering, mining, grazing, or agriculture) were not considered for inclusion in parks.

¹⁶ Other names considered for the park included: Tannedese , Essanapis , Jatonabine, Juniata , Montepelles, Onantae, and Monticentum (Great Plains Research Consultants 1984:183).



Figure 2.3: Banff Park Museum, built in 1903, contains a large collection of taxidermied animal bodies from the park and oddities from other areas of Canada, interesting as an archive of old wildlife perceptions. (Photo by author)

While there was support for economic development, even in 1930 there were the beginnings of conservation efforts, which sought to protect wildlife. However, this protection of wildlife was often caught up in the rhetoric of “game,” which had characterized much of the discourse concerning animals before this point. The conservation of wildlife was not for pure protection or subsistence hunting, but was an elitist endeavour to protect game for sportsmen; and native groups and lower-class people were excluded from the hunt.

However, the concept of ecology was present in an early form from the 1930s onward “wherein the multiple and intricate links among all parts of the natural environment are seen as important” (Kopas 2007:7). Related to this was the incomplete coverage of ecosystems that

national parks provided. In 1933, the US National Parks Service published *Fauna of the National Parks of the United States*, which concluded that the area set aside by national parks was not sufficient for preservation of wildlife, especially since the type of land often set aside was less than ideal (i.e. icy mountaintops): “A park is an artificial unit, not an independent biological unit with natural boundaries (unless it happens to be an island)” (qtd. in Runte 1979:138).¹⁷ Runte (1979:140) describes the situation well: “In creating the national parks a little square has been chalked across the drift of game, and the game doesn’t stay within the square.”

The question of park uses, whether for human use and recreation or for preservation or conservation of wilderness and wildlife, became a moot point for several years. The Great Depression and World War II forced both developers and environmentalists to go underground in their efforts in the park because of a lack of resources (Hart 2005:6). One way to cut corners was the use of cheap labour during the two world wars and during the Great Depression from unskilled foreign workers, the jobless and homeless, pacifists, possible subversives and enemies of the state, and prisoners of war.¹⁸ During this same time there was little park-related development in the parks, and resources were put into more vital areas. However, Calgary Power used World War II and the increased demand for power as a reason to dam Lake Minnewanka. Despite reservations on the side of park officials, the development did not become controversial (Armstrong et al 2009:137-139). It was not until the mid-1950s that the conflict between these groups resumed, a conflict that had begun with the 1921 proposed damming of

¹⁷ Runte (1979) laments that ecological knowledge did little to change American national parks policy and management initially: “Even later awareness about a growing need for wilderness, wildlife, and biological conservation did not change the primary criterion of parks—national parks must begin worthless and remain worthless to survive” (55).

¹⁸ Bill Waiser details the story of labourers in the national parks during these times in *Park Prisoners: The Untold Story of Western Canada’s National Parks, 1915-1946*, Saskatoon and Calgary: Fifth House Publishers, 1995: “The same special areas, moreover, that are synonymous today with holiday escape and outdoor activity for people across the country were used at one time to inter other, less fortunate groups. For thousands of men, the parks meant confinement, isolation, and toil” (2).

Lake Minnewanka and then the 1923 Spray Lakes controversy. The conservationists became much more prominent in the next round (Kopas 2007:11).

New pressures appeared in the post-war decades. Skiing became popular in Banff during the 1930s, and mechanization of chairlifts followed soon after in 1949.¹⁹ Other winter sports and activities became popular and drew visitors to BNP. Previously, the park was only visited during the summertime (Lothian 1987:36). In the coming decades, environmentalists railed on the detrimental impacts of mechanized skiing in the park and the development that accompanied ski resorts. Alongside ski development, new transportation augured change. In 1949 Canadian legislators passed a law establishing the Trans Canada Highway (TCH), which would connect the Atlantic and Pacific coasts with one highway, the longest highway in the world (Forman 2003:35). The impact of development in BNP and wildlife populations was magnified with the construction of the TCH through the park.

Beginning in the 1950s and 1960s Parks Canada began to turn to interest groups for political and logistical support in the development of policy (Kopas 2007: 41). Parks wanted a group specifically devoted to Canadian national parks to help them: “Parks Branch officials had already begun to advance the idea of an interest group to speak for preservation in the late 1950s, and they continued to support the formation of such a group during and after the [Resources for Tomorrow, 1961] conference” (Kopas 2007:49). The wish of Parks Canada came true when, with some pressure, the National and Provincial Parks Association (NPPAC) was formed in 1963 (Kopas 2007:50).

¹⁹ For a detailed account of skiing history in Banff, read: Chic Scott, *Powder Pioneers: Ski stories from the Canadian Rockies and Columbia Mountains*, Vancouver: Rocky Mountain Books, 2005.

1960s-1980s

During this next period Parks Canada attempted to define more clearly its own identity and main reasons for managing the national parks: “The 1964 National Parks Policy was a means of informing the public about how the branch intended to carry out the national parks mandate, and its preparation was seen by the branch as strictly an internal responsibility. [...] The general thrust of the policy statement was to recognize the existence of human activities within parks but more strongly to emphasize the need to maintain its natural integrity” (Kopas 2007:37, 40). Parks Canada released the National Parks System Planning Manual, which provided a unifying theme for all of the parks and reinforced the importance of both development and protection of the environment (Kopas 2007:53-55).

While Parks Canada’s policies may have been strong, the organization itself was unprepared to act in the next confrontation between environmentalists and developers. It began with a push from the Calgary Olympic Development Association and Banff skiing enthusiasts to have the 1964 Winter Olympics held in Banff (Hart 2005:6). The Banff Citizens’ Committee thought that this was “the idea of several promoters in Calgary who are looking to make some fast money, and do not care what happens to Banff National Park” (qtd. in Hart 2005:7). While the 1964 bid failed, developers and skiing enthusiasts attempted to get the Olympic bid two more times, aiming for the 1968 and 1972 Winter games. Environmentalists’ protests of the games supposedly affected the vote of the International Sport Federation, and the 1972 games were awarded to Sapporo, Japan as a result (Lowry 1998:149). Partly in response to these attempts to have the Olympics held in Banff, in October 1968 the National and Provincial Parks Association

of Canada (NPPAC)²⁰ held a conference at the University of Calgary called “Parks for Tomorrow,” which was led by Dr. Gordon Nelson (Hart 2005:8). NPPAC strongly opposed the use of Banff in the 1972 Olympics (Bella 1987:113).

Dr. Stephen Herrero, a biologist who studied bears in Alberta, said that the ecosystems of BNP were simply “private playgrounds of the people of Alberta” and were just “a colourful backdrop for the developments” (Hart 2005:9-10). In the late 1960s and early 1970s the focus of park management began to shift from a recreational direction to a more ecosystem-based approach. A 1967 Warden Service study showed a shift from “cowboy”-like wardens to those with training in the sciences, biology and forestry (Hart 2005:12). To paraphrase Tina Loo (2006:156) and Aldo Leopold, wardens began to “think like a mountain” rather than like mountain men.

In the 1970s public involvement in the national parks grew, and interest groups such as NPPAC had an important role in the crafting of the 1979 national parks policy statement (Kopas 2007:67). The strength of environmental groups’ involvement came to full force in April 1971 and afterward as they responded to the development plan for Village Lake Louise. Parks had been in negotiations with the developers, a conglomeration of Imperial Oil and Lake Louise Lifts called Lake Louise Ltd., without informing the public. Parks had been looking to develop Lake Louise as a visitor service centre since the Winter Recreation Policy of 1965, which encouraged year-round recreational use of the park, was implemented. In 1970 Lake Louise Ltd. came forward to offer to develop the area. When the extensive plans for development came out, NPPAC demanded separate public hearings outside of the preliminary hearings scheduled for the Four Mountain Parks Planning Program. Both Lake Louise Ltd. and NPPAC prepared and

²⁰ Formed in 1963.

campaigns heavily before the March 1972 hearings on Village Lake Louise developments (Kopas 2007:76-79). The Calgary-Banff Chapter of NPPAC participated in three days of public hearings on parks master plans and for discussion on the proposed Village Lake Louise project in March 1972, which broke down into contentious discussions and shouting (Hart 2005:10). This was the second conservation movement in Canadian national parks according to Bella (1987), and involved more people than any other debate over the future of the parks (122). Parks Canada scaled down extensive development plans because of strong public opposition of three to one in briefs and letters sent to the federal government (Bella 1987:125). Alberta had originally been supportive of development but was swayed by public opinion to oppose the plan. Minister Jean Chrétien had also wanted to let development go forward but was unwilling to go ahead without the support of Alberta with such an unpopular decision. On July 12, 1972, Chrétien said:

It is our judgment that the project as planned is too large and could result in an undue concentration of visitors and residents in this area. At present no reliable measurements have been developed which will predict with certainty the impact of human use. Where there is room for doubt priority must be given to park values; and we must err on the side of park protection. (qtd. in Hart 2005:10)

Hart (2005:11) argues that these hearings were a declaration of war between conservation and development interests. Conservationists began to take a stronger stance on environmental issues, and businessmen hired consultants and specialists for support. Parks Canada was made uneasy by the conflict and steered away from public hearings in future public consultations and instead relied on open houses and written briefs. It was unable to produce strong decision-making because of its uneasy situation between developers and environmentalists. During this time

development pressures on Banff lessened and were redirected to neighbouring Canmore and the Eastern Slopes (Hart 2005:11).

The 1979 Lake Louise Action Plan set guidelines and limits for development within the Lake Louise area, and these limits were implemented fairly well. This was the result of years of controversy and public scrutiny (Pachal 1985). Another important development in 1979 was the crafting of a new policy statement, which was important for its inclusion of public participation and Aboriginal involvement as necessary in parks planning (Kopas 2007:88-94).

The TCH would continue to play a vital role in wildlife conservation and discussions of wildlife conservation in BNP and was a cause of much contention. After the TCH passed through the park, Public Works Canada completed studies on the possible doubling of the lanes from two to four (twinning) or installing other upgrades. Phase I of the twinning was completed in 1985 and Phase II in 1987. The main reason for the twinning of the TCH was not because of congestion but because of safety issues. There had been a number of deaths on the TCH in and near BNP resulting from speeding and impatient drivers. Many traffic incidents and collisions involved wildlife, and the first 27 km of the TCH was quickly twinned (Clevenger and McGuire 2001). TCH scientists realized that this would have a detrimental effect on wildlife populations and attempted to incorporate some measures to prevent highway wildlife mortalities, including elk-proof fencing on both sides of the twinned TCH within the park and wildlife underpasses to allow for some wildlife movement across the highway (Maerz 1994:7,10).

Four Mountain Parks Planning Program

Together, the four Rocky Mountain Parks (i.e. Banff, Jasper, Kootenay and Yoho) had an area of 20,160 km², and in 1985 United Nations Educational, Scientific and Cultural

Organization (UNESCO) designated the parks a World Heritage Site²¹ (Environment Canada and Parks Canada 1986:ii). The Four Mountain Parks Planning Program came about to determine the future use of the parks: whether it should be restricted, allow further access, or remain as it was (Environment Canada and Parks Canada 1986: iv). Parks Canada announced the Planning Program in 1982. It was to last 2.5 years and cost \$1.1 million (“National park plan unveiled” 1982). In January 1983 Parks Canada signed a Purpose and Objectives Statement concerning the Four Mountain Parks: “Due to the well developed visitor infrastructure and extensive use made of these parks, the major emphasis will be placed on the protection and preservation of natural resources and processes” (qtd. in Pachal 1985). However, management directions did not fall in line with this statement. Background reports, the formation of planning options, the development of a Management Framework for the Four Mountain Parks and plans for the individual parks followed. Parks Canada encouraged public input throughout the process (Environment Canada and Parks Canada 1986:2). The Management Framework was linked with 1979 Parks Canada Policy (1986:3). The Management Framework (Environment Canada and Parks Canada 1986:21) stated that:

These natural areas have a unique, intangible aesthetic quality; the visitor to a wild and pristine world has the chance to experience the natural environment on its own terms. But the value of those areas to humans depends on the maintenance of that natural environment. Moreover, natural areas contain scientifically important information about ecological processes that are unaltered by human activity. The scientific and human value of such primitive areas depends to some extent on their size, which must be large

²¹ This is commonly referred to as the World Heritage Convention, which recognizes specific sites around the world as “having outstanding natural and/or cultural features” on an international level and give these sites special recognition and protection (Elliot 1998:177). This is a prestigious designation, and the nation is expected to take special care of the site.

enough to retain ecological integrity and be defined by recognizable topographic boundaries.

Parks Canada considered and addressed the communities of Banff and Jasper and their roles in the national park context as a part of the planning process (Environment Canada and Parks Canada 1986:58). The management plan process was completed in 1987.

One of the public consultation processes allowed 2500 selected Canadians to choose one of three possible plans for the management of the Four Mountain parks in June 1984. One choice was to maintain the status quo. Another was to allow for limited growth. The third option was intense development in which the parks would be “aggressively marketed throughout the world” (qtd. “Three futures for the parks” 1984:6-7). Developers would be allowed to build new accommodations. Airstrips with flights to Calgary, Edmonton and Vancouver would be constructed. Both Banff and Jasper would be allowed to grow significantly, and more roads and tourist attractions would be developed. Parks Canada favoured the low or no growth option (“Three futures for the parks” 1984:6-7). Each plan appealed to different interest groups. Alberta Wilderness Association was:

appalled that the draft management plans for the Four Mountain Parks were formulated by Parks Canada bureaucracy ten days prior to the initial deadline for public input on the plans [...] Unbeknownst to Canadians who were busy writing their responses and attending meetings on the three management options put forward for 12 planning areas in the Four Mountain Parks, a July 17-19, 1984, workshop of the Parks Canada Four Mountain Parks Planning Steering Committee and Tourism Canada was held to establish the management direction for these parks and preferred plan proposals for each of the 12 planning areas. (Alberta Wilderness Association et al 1984)

Parks Canada slipped up in their communication with the public, which was not missed by special interest groups. Tourism groups were also unsatisfied with the planning process. Tourism Industry Association of Alberta representative Walter Urquhart said that the plans “failed to adequately consider the very important role tourism plays within the four mountain parks” and said that his group “must take exception to the atmosphere of confrontation” caused by environmental groups such as the Alberta Wilderness Association and branches of the Sierra Club (Frank 1984).

Media also critiqued the Four Mountain Parks Management Review for having poorly-attended open houses. Journalists charged that decision-makers spent months compiling results behind closed doors in meetings with tourist and development interests (Andreef 1995:2), to the frustration of environmental groups. “Parks for Tomorrow,” a coalition representing major Canadian environmental groups refused a similar closed-door meeting with Parks Canada to discuss the Planning Scenario for the Four Mountain Parks because it felt that these meetings changed the rules of the game in what originally had been an open process of public consultation (“Environmental Groups Decline Invitation” 1984). Some people countered the critiques of environmentalists entirely opposed to development. Donald Pike, a federal official overseeing planning for the Four Mountain Parks said: “There are those who earn their living from the people who visit the parks. We owe something to them as well as to the people who want to come and enjoy the parks” (qtd. in “Contesting the Wilderness” 1984:65-66). Walter Urquhart responded: “I do not think the tourist industry or Canadians would like to see a Disneyland-like facility develop in the parks. But there must be an open-door policy for development as the need arises” (qtd. in “Contesting the Wilderness” 1984:65-66). In response to the Four Mountain Parks Planning Program, Minister Tom McMillan introduced new legislation in the House of

Commons in December 1986, which did allow for new development, but policies did not allow for expansion beyond these new boundaries. Wildlife and ecological integrity were to be protected in the backcountry (Bella 1987:120).

The 1988 amendments to the National Parks Act (re)affirmed a commitment to protecting the environment and “ecological integrity”: “Maintenance of ecological integrity through the protection of natural resources shall be the first priority when considering park zoning and visitor use in a management plan.” Attridge (1998:229) identifies two ways to enforce the protection of ecological integrity: through “specified prohibited or restricted uses” and management plans. The concept of ecological integrity was included in the 1988 amendments because of citizen presentations to members of parliament at the House of Commons Committee meetings on the act. In fact the section on ecological integrity was almost word for word from the Canadian Parks and Wilderness Society’s (CPAWS, formally NPPAC) submission. “Whereas the basis for environmental protection in the preamble to the act in 1930 was vague, the amended act (1988) was much more specific and instructive” (Kopas 2007:112). Ecological integrity has been a fundamental guiding concept for national and provincial parks ever since.

In 1990 the Town of Banff officially incorporated and obtained a certain amount of freedom from Parks Canada. Although the Town wanted to keep Banff a smaller residential community, they also wanted to develop commercial activities more. The incorporation of the Town of Banff made the implementation of long-term plans difficult for Parks Canada. While Parks Canada still maintains control over zoning, the Town must still meet the requirements of the Canadian Environmental Assessment Act (CEAA). Despite this, Parks Canada lost much control over the Town of Banff, which was more concerned with attracting tourists than long-

term plans. Development plans were not always contained underneath the umbrella of the CEEA (Lowry 1998:179-181).

Conclusion

Writing in the late 1990's, Nelson (1998:291) noted that the wilderness idea still held sway in public discourse about parks despite years of research recording a long history of human-caused change in natural landscapes.²² People liked to think about national parks as places where human impact was at a minimum. Based on the state of the environment, groups in power, and the contemporary values ascribed to wildlife in Banff National Park's wildlife policy has moved through three main phases: from being regarded as "game" or "pests" (1887-mid 1960s) to beings worthy of preservation (mid 1960s-1988) and finally to integral parts of a natural ecosystem (1988-). Wildlife contributes to "ecological integrity" in the Banff-Bow Valley. The concept of ecological integrity emerged officially in Canadian parks discourse with its inclusion in the 1988 amendments in the National Parks Act, and it has gained authority since especially with its claims to scientific legitimacy:

The concept of ecological integrity has greater power in the scientific or professional sense. The term ecological integrity rests on the improved scientific and scholarly understanding of environment or ecosystems which has developed in the last two decades in conservation biology, stress biology and landscape ecology. Ecological integrity has more explicit links to plant succession, animal migration, lake and river fluctuations, fire dynamics, predators, disease and other natural and human processes than does the more general concept of wilderness. (Nelson 1998:291)

²² For the classic critique of the nature concept, read William Cronon's essay, "The Trouble with Wilderness; or, Getting Back to the Wrong Nature." In *Uncommon Ground: Toward Reinventing Nature*. Edited by William Cronon. New York and London: W.W. Norton & Company, 1995.

Bella (1987:161) stated that “Canada’s parks have survived and expanded over their first century because they are parks for profit.” It was economic motivations that first inspired the reservation of Banff Springs and surrounding scenery. Tourism became a huge money-maker and draw for the parks, but it also became a threat to the environment, which it was utilizing:

Commercial tourism is the last major threat to the national parks. All parks have to deal with the tension between the need to preserve a landscape with as little human impact as possible and the need to make that landscape accessible so people may enjoy and benefit from the natural environment. That tension is exacerbated by economic imperatives.

(Bella 1987:158)

Runte (1979:178-179) comes to the same conclusion with national parks in the United States: “More than a century after inspiration of the national park idea the issue remains: at what point is conservation in fact sacrificed for the sake of novelty and convenient access? Conceivably, a definitive answer may never be possible.” However, certain groups in the Bow Valley felt that the point had been crossed or was about to be crossed. The next chapter traces the history of the Banff-Bow Valley Study, which is the most recent conservation movement in Banff National Park, and attempted to resolve the tension between development and preservation by closely dealing with the public and making serious political attempts to determine the purpose of Banff National Park.

Chapter 3: The Banff-Bow Valley Study—“At the Crossroads”

Tensions between environmental groups and business and tourism interests in Banff polarized and grew increasingly contentious starting with several bids for the Olympics in 1964, 1968 and 1972 (Hildebrandt 1995:62-66). Seeking to maintain a position of neutrality to let the two sides fight it out in the media Parks Canada appeared between two poles. Despite strong policies, especially in the 1988 National Parks Act amendments favouring “ecological integrity” and “sustainable tourism,” Parks Canada employees felt powerless to act because of a lack of resources and strongly differing opinions and feelings about the management of Banff National Park (BNP). Neither the environmental groups nor business interests involved backed down, but rather the hostility of their interchanges grew, coming to a head over future development of the Trans Canada Highway (TCH) and the World Heritage status of the Four Mountain Parks of Banff, Jasper, Kootenay, and Yoho. The Banff-Bow Valley Study (BBVS) was inaugurated in 1994 by the Ministry of Canadian Heritage as a response to the tensions in the Bow Valley and the concerns over potential damage to its ecosystem. This chapter will explore the development of the Banff-Bow Valley Study from its origins, through the process, including both trials and triumphs, to the writing of the final report. This and following chapters analyze the BBVS process as an example of struggles over national parks and attempts to decide use politically. The next chapter will deal more specifically with the results, recommendations and reception of the study by the public, Parks Canada and others.

The crossroads between environmentalists and developers in Banff were quite literally crossroads—the intersections of the Trans Canada Highway and major wildlife corridors. Already with the building of the Canadian Pacific Railway through Banff in 1883, the major

east-west transportation artery of Canada cut through the region, changing the geography of the Bow Valley significantly. The rail line bisected and fragmented the landscape, with heavy impacts on wildlife movements on a north-south trajectory, as well as behaviours. The TCH was completed in 1963 and served to amplify the effects on wildlife that the CPR line had initiated, and also to increase the flow of people and goods through the park while bringing in more tourists. Almost immediately after the highway was completed in 1963, Public Works Canada conducted studies of a doubling of the lanes from two to four (twinning). Such work started in the late 1970s with Phase I reaching completion in 1985 and Phase II in 1987 (Maerz 1994). Minister of Canadian Heritage Michel Dupuy approved Phase IIIA of the TCH, which cuts from Banff west 18 km to Castle Junction. Some cited safety concerns and wildlife protection as the reason for the twinning. The twinning was meant to speed up the flow of traffic and lower the accident rate (Rooney 1996a). With this extension, 45 of the 75 kilometres of TCH in BNP would be twinned with 2.4 m-high wildlife-exclusion fencing on both sides of the highway, which serves the purpose of reducing wildlife mortalities caused by highway traffic but also prevents wildlife from moving to habitat on the other side (Clevenger 2005: 94).

With the announcement of the continued twinning of the TCH, environmental groups became incensed and began to threaten political action. Harvey Locke, president of the Canadian Parks and Wilderness Association (CPAWS), and other environmental advocates wanted to put pressure on the United Nations to revoke Banff's status as a World Heritage Site (Adams 1993). This threat was made publicly as early as September 1992 by Dianne Pachal of the Alberta Wilderness Association (AWA), who said: "it's a very serious step and one we don't take lightly" (qtd. in Sands 1992). Mike McIvor, a spokesperson for the Bow Valley Naturalists responded: "The idea that I have heard kicked around and discussed with other people is that

there is cause given the development in the four mountain parks. The values that resulted in the designation as a World Heritage Site are being eroded” (qtd. in Sands 1992). These groups were also concerned with the impact of development in the Banff town site and the approval of an expansion proposal for Sunshine Village (skiing), which had once been rejected by Parks Canada (Sands 1992). The announcement of the TCH twinning built upon the historical tensions between conservation and preservation-minded groups and developers. Various groups and communities, including Canmore, Bighorn, BNP, the Calgary Regional Planning Commission, Alberta Wildlife Association, CPAWS, and the Bow Valley Naturalists, put pressure on the Alberta government to create a special advisory committee to look at the effects of development in the Bow River Valley. Such a group would identify wildlife corridors and migratory paths



(Adams 1994).

Figure 3.1: The Trans Canada Highway near Canmore, Alberta, located just 8km from the eastern gate of Banff National Park. (Photo by author)

CPAWS president Harvey Locke created even more media buzz when he called the highway twinning, the “Berlin Wall” of biodiversity, citing the potential harm to wildlife: “The twinning of the highway in Banff National Park (from Sunshine to Castle Junction) has the potential to be a disaster for the ecological integrity of the entire Canadian Rockies. It would be ironic if the national park created one of the biggest problems” (qtd. in Barnett 1994). People on the environmental side of the debate claimed that all of the development in the Bow Valley of Banff National Park was detrimental to wildlife because it was the site of most of the park’s montane ecoregion, which is important habitat for many of the species and a region of high biodiversity (Eyre and Jamal 2006). While most of the park is subalpine or alpine (a.k.a. “rock and ice” landscapes), the montane is the land found in the valley bottom, which is attractive for both animals and humans. Multiple developments built over the hundred years of the park’s existence, covered 20% of this important ecoregion (BBVS 1996). The Town of Banff, the Hamlet Lake Louise, the Trans Canada Highway, the 1A highway, the Canadian Pacific

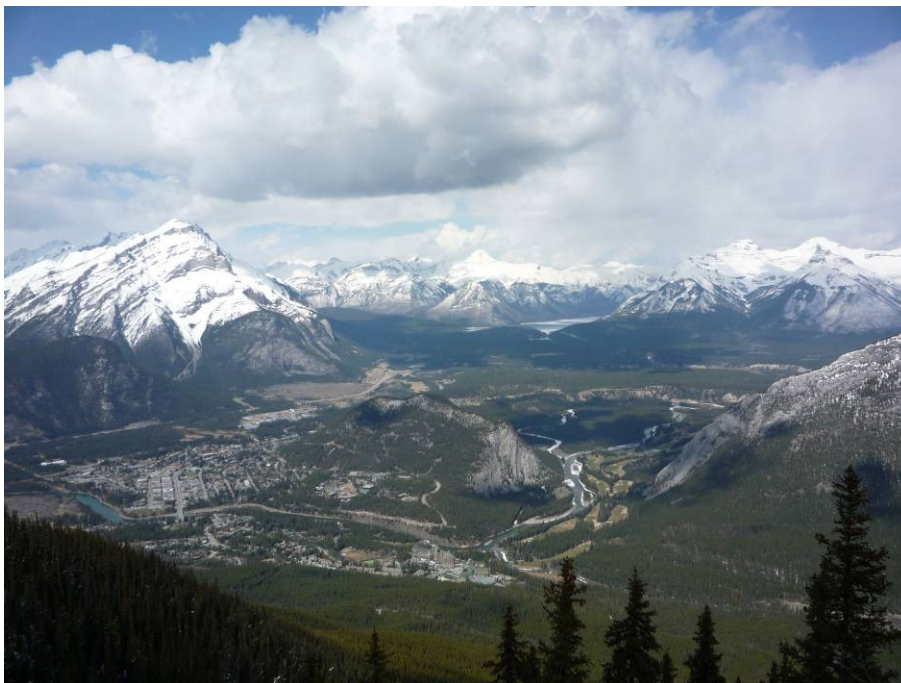


Figure 3.2: View from the top of Sulphur Mountain looking down of the Bow

River and the Town of Banff. (Photo by author)



author)

Figure 3.3: On Banff Avenue, the main street in the Town of Banff. (Photo by

Railway, the Lake Minnewanka dam, Spray River alterations, a 27-hole golf course attached to Banff Springs Hotel, and three ski resorts all occupied space in BNP, which environmentalists saw as significantly disrupting wildlife and other ecosystem processes (Dearden and Dempsey 2004:229; Hodgins and Cook 2000:4). On the other side of the debate John Seigner, the chairman of the Banff-Lake Louise Tourism Bureau responded: “I hope we can find some way to accommodate the wildlife but there comes a point at which you have to look at the biggest carnivore of all, which is the automobile” (qtd. in Barnett 1994). Businesses in BNP were booming with an increase of park visitors to nearly 5 million per year in 1994 with \$873.1

million in visitor expenditures, making tourism a major economic force in the Bow Valley (BBVS 1996). “To accommodate these visitors, there are more than 5,600 hotel rooms, 60 restaurants, and 175 specialty shops. In all, more than 1,300 businesses are licensed to operate in the park. The population of the town of Banff is approximately 7,600 and of the Hamlet of Lake Louise, 1,560” (Ritchie 1999: 101).

In light of the increasingly hostile exchanges between interest groups within the valley over the TCH, rumours that the UNESCO World Heritage status of the Four Mountain Parks (Banff, Jasper, Yoho, and Kootenay National Parks) would be revoked, and growing public concern (Jamal and Eyre 2006), the Minister of Canadian Heritage, Michel Dupuy, decided that something needed to be done to diffuse the explosive situation and assess the extent of ecological devastation in the Banff-Bow Valley. In March 1994, Dupuy announced that there would be a two year study done on the Banff-Bow Valley, conducted by experts independent of Parks Canada. He set three objectives for the study: to “develop a vision and set goals for the valley, complete a comprehensive analysis of existing and future information needs, and provide direction for the management of human use and development” (Hodgins et al 2000).²³ This was the first time that a Parks Canada public consultation process would be done by outsiders. The purpose of this study was to provide recommendations for the long-term management of the park, which would take both environmental concerns and development needs into consideration. From the beginning, it appeared as though these recommendations might lead to major changes in the upcoming Banff National Park Management Plan (Andreef 1994). What would be involved in the study however was unclear in the early stages. Little did anyone know that the Banff-Bow Valley Study (BBVS) would take two-and-a-half years, cost \$2.8 million, and absorb

²³ CPAWS claims that its opposition to development in BNP directly led to the creation of the BBVS. However, Minister of Heritage Michel Dupuy takes credit for the beginnings of the BBVS (Lovelock 2002:12).

many more hours of work and effort than had originally been intended for by the Task Force, the Secretariat and others involved. In the end, they produced a substantial technical report and a large body of over twenty supporting reports, analyses and data (Hodgins et al 2000). This work and the process developed to achieve it created a body of data, analyses and recommendations that were ground-breaking in their attention to detail and coverage of issues in BNP. A study of this scope had not yet been conducted in Banff or any other national park in Canada, and its willingness to engage with a wide variety of topics and actively engage multiple stakeholders was ambitious.

Assembling the Task Force

One of the first tasks was to assemble the group of experts who would be conducting the study. The final Task Force consisted of five experts, three of whom were from academia and two from the consulting field, who were supported by a five person Secretariat²⁴, many scientists, consultants, Parks Canada staff, and other members of the public. Senior Parks Canada officials approached Dr. Robert Page, the Dean of the Faculty of Environmental Design at the University of Calgary, about the study before it was presented to the Minister. Page had been chairman of the Committee Advisory Council in Ottawa for five Ministers and was familiar with park issues and the Banff area:

Sandra Davis, who was the original regional executive director for Parks [Canada] out of Calgary, she dreamed it up. She came to me first of all in connection with it, and she was very enthusiastic because she thought parks were really at a crossroads, but her

²⁴ The Secretariat was composed of Doug Hodgins (Executive Director), Charlie Pacas (Ecological Science Officer), Richard Mudry (Public Involvement Coordinator), Eva Katic (Research and Administrative Assistant), and Christine Kraayvanger (Round Table Assistant) (Hodgins and Cook 2000:38).

successors were far more...antagonistic through most of it, where as we had enormous cooperation from the park wardens, and Charlie Zinkan, the superintendent of Banff National Park. (Page Interview 2008)

Once Page was appointed as the chair of the Task Force, he recommended four people for the remaining spots on the Task Force, three of whom were accepted. The final four Task Force members included Dr. Suzanne Bayley, Douglas Cook, Jeffrey Green, and Dr. Brent Ritchie. Bayley was an ecologist from the University of Edmonton and the expert on aquatic issues for the Task Force. She described how the Task Force was formed and her place in it:

I had a graduate student who was working in Banff, and I had a project ongoing at the wetlands in Jasper. So I knew some of the Parks Canada people because of that, and we had gotten to be colleagues. So, basically because of my involvement with that [I was on their list of possible Task Force members]. They were forming the Task Force, and I actually think they wanted a woman. You can't have a Task Force with all men, so they decided, 'well, what women are there around that have these backgrounds?' And basically on the Task Force, they were looking for people who have terrestrial, scientific knowledge of bears, wolves, elk, and whatever indicators might be used. They were looking for a person who understood the aquatic side of the situation in Banff. They wanted somebody who understood the tourism aspect. And they wanted somebody that understood, what I would call, governance. And if you actually look at the Task Force that's basically what they got. (Bayley Interview 2008)

Doug Cook, coined the "industry person" by the media because of his connection with Imperial Oil as an executive, was the President and CEO of Taurscale Consultants Ltd. He had some experience dealing with environmental concerns when he served on the Canadian Environmental

Advisory Council with Bob Page, which is a probable reason for his offer to join the Task Force, although Cook was initially approached by Doug Hodgins, the executive director of the BBVS Secretariat (Cook Interview 2008). Jeff Green, a wildlife ecologist and a Principle of Axys Environmental Consulting Ltd., filled the terrestrial niche and had experience in British Columbia and Alberta in environmental impact assessment. Green had familiarity and experience in the Banff area with the Three Sisters Resort Development in Canmore, Alberta, and with hearings for another ski development in Crowsnest Pass. These were valuable experiences for handling the environmental-developmental conflict in the Banff-Bow Valley (Green Interview 2008). Dr. Brent Ritchie was the “tourism guy.” He was a professor and the Dean of the Faculty of Management and also the chair of the World Tourism Education and Research Centre at the University of Calgary (Banff-Bow Valley Study 1996). Ritchie was the only person that Bob Page seemed to want for this niche on the Task Force (Ritchie Interview 2008).

Dupuy announced the final members of the Task Force to the media on July 5, 1994 (Jamal et al 2002: 167). Once the Task Force was assembled, the question became how to go about the study in such a way that it would not go the same way as previous Parks Canada public consultations alienating stakeholders and the public, who felt that their involvement with

The BBVS Process

Phase I (Sept. 1994-Dec. 1994): Development of a public involvement process, and development of an ongoing knowledge base to support the BBVS.

Phase II (January 1995-March 1995): development of common vision, principles and goals through Round Table process and assessment framework.

Phase III (April 1995-October 1995): identification and assessment of key issues within the community.

Phase IV (November 1995-June 1996): preparation of the Final Report to the Minister.

(BBVS 1995: “Banff-Bow Valley Study: Background Information”)

Figure 3.4: Banff-Bow Valley Study Phases.
(adapted from BBVS 1996)

the consultation process was just as another box to tick off in a list of things that Parks Canada had to do, their voices not really being heard or considered in the process. Eyre and Jamal (2006:191) point out that “almost immediately, the task force’s legitimacy, independence, and objectivity were questioned, as well as the need for another government study.” The Task Force had to respond in such a way to counter the suspicions of stakeholders and the community. Chair of the BBVS, Bob Page, said early on: “We’re stepping into a situation where there are fundamental differences of opinion and we’re actually trying very carefully to listen to the Banff community” (Andreef 1994b). Page also commented to the media that he made sure that the five members of the Task Force would be in complete control of all aspects of the study and not be manipulated by Parks Canada in any way to produce certain results. The Task Force members were aware of the conflict between interest groups in the Banff-Bow Valley and the discontent with Parks Canada over the public consultation process and particularly with the latest Parks Canada review, the Four Mountain Parks Management Review (Andreef 1994b). From the beginning, many members of the Banff community, especially in the business community, were suspicious of the Task Force’s motives.

In Limbo?: Development projects and the course of the BBVS

A major concern of the Task Force *was* that development was having a detrimental impact on the environment of the Banff-Bow Valley. As a result, the work of many development projects planned were suspended at least until the BBVS had determined the possible extent of their impacts, so that the Task Force would have a stable environment in which to evaluate. Parks Canada used several criteria to determine whether projects should

continue during the time that BBVS was active.²⁵ There were, however, four projects, which the Minister of Canadian Heritage, Michel Dupuy, allowed to proceed despite possible negative impacts on the environment. These included the Phase 3A twinning of the Trans Canada Highway (TCH), a series of development proposals by Canadian Pacific, development at Goat's Eye, and an expansion of the ski facilities at Sunshine Village. Dupuy responded to criticism by saying that the further development of these projects were already out of his control because they were at such an advanced degree (Rooney 1995c). "If any of the projects is shown to have serious or uncontrollable negative environmental effects, I doubt they will move forward" (qtd. in Mitchell 1995). During the negotiations for the study Bob Page and others pushed for alterations to the TCH since it was seen even before the study began as a major obstruction to wildlife and ecological integrity in the park. "...[J]ust at the time they were building Phase 3A of the Trans Canada. We said, show us that you really mean business, put in overpasses [...] and especially Bob [Page], who did some of the negotiation at the start..." (Bayley Interview 2008). The result was that the TCH project, which cost \$32 million, would allocate 33% of this total toward wildlife protection measures, including two \$2.5 million wildlife overpasses (Red Earth and Wolverine Overpasses) and 15 wildlife underpasses. The overpasses would utilize a new design from the Department of Public Works, which included the planting of trees and other vegetation on top of the overpasses to create a more natural setting to encourage animal usage (Andreef 1995c).

²⁵ Project Criteria included: 1) Projects related to health and safety and environmental protection; 2) Approved Projects which have a registered EARP [Environmental Assessment and Review Process] as of March 31, 1994; 3) Projects which are covered under a contractual obligation; 4) Projects which are of a replacement nature, or for the purpose of normal maintenance; 5) Projects within the Town of Banff due to the Town's special status and existing Federal/Provincial agreements; 6) Projects that are significantly advanced or that may result in a net environmental gain; 7) Minor projects on previously disturbed lands or minor projects that will not result in the requirement for additional staff(Round Table Working Book 1995).



Figure 3.5: "Wait just a darn minute, here!" a planner says about the twinning of the TCH near Banff as an elk looks on and laughs at the foiled plans of humans (Banff Crag and Canyon 27 September 1995).

One of the first tasks was to determine the Task Force's course of action towards study completion. The Bow River watershed within Banff National Park was chosen as the study area (BBVS 1996). The watershed from the headwaters near Bow Lake to the Banff East Gate has an area of 3504 km and is approximately 53% of the total area of BNP (Ritchie 1998:294).

Doug Hodgins, the executive director of the Secretariat, and others took a month to look critically at the overall management of the project and created an ambitious plan of work for the Study (Cook Interview 2008). Before the bulk of the work began, the Task Force devoted some time to familiarizing themselves with Banff National Park. Some members had little experience

there beyond being tourists, so the learning curve was steep, with visits to the backcountry, helicopter trips, meetings with stakeholders and learning their views about what was important in the Banff-Bow Valley. There was also a lot of reading and research done on the history of the park (Cook Interview 2008).

The Public Consultation Process: Journey to the Round Table

Because the conflict between stakeholders was one of the main reasons for the study, public consultation and input became a vital part of the BBVS. Originally, the plan for community input and participation was limited to deputations from various stakeholders, but Task Force members felt that they were only receiving entrenched positions, which would do little to get at solutions to the issues at stake in the Banff-Bow Valley: “The deputations were helpful in understanding the scope of the problem and probably led us—I don’t know now how we thought of the Round Table, but we certainly were getting the feeling that we needed something, some breakthrough process to get everybody out of the trenches and working on the solutions” (Cook Interview 2008).

As the Task Force was deciding how to go about consulting the public, one of the Task Force members, Jeff Green, pushed for a facilitative round table process. “A round table is a collaborative process bringing conflicting stakeholders together to interact in a relatively apolitical forum using some form of consensus decision-making. Offered as attractive alternatives to traditional top-down or adversarial methods for resolving conflict, collaborative processes are often based on seeking ‘common ground’ or consensus on plans, policies and actions” (Jamal 2004:355). Green had worked on several other round tables and had several others on the Task Force back up this idea. The Task Force presented the round table process as a possibility at public meetings:

I think it's safe to say none of us quite realized how much work it would be, but it was very much an outward-reaching process, so it wasn't like we made decisions and then came top-down onto them. We had a number of public meetings where we talked about it. We put the idea forward. Then there was a lot of behind-the-scenes activity where we had to go out and meet various people. There were some sectors—I think it's fair to say they were reluctant to participate in the process. And some that were very eager and what the hard part was, was trying to get some balance around the Round Table. (Green Interview 2008)

There had been a short history of multi-stakeholder processes in Canada upon which the Task Force could draw. The National Round Table on the Environment and the Economy in the late 1980s is one of the most prominent examples, but there have been a number of regional and local level round tables. At the provincial level, the Commission on Resources and Environment (CORE) was a 1992 initiative to develop a strategy for land use and resource and environmental management in British Columbia. One part of the public participation was multi-stakeholder round tables set up in four regions in the province (Jamal 2004:255). The CORE process became a key example for the BBVS.

The BBVS public participation process can be seen as a continuation of Parks Canada's 1964 policy, which called for greater public participation and involvement with decision-making and with Park Canada's own responsibilities in the national parks (Kopas 2007: 176). The BBVS Round Table²⁶ was composed of sectors representing interest groups in the Banff-Bow

²⁶ The Banff-Bow Valley Round Table process has been thoroughly studied as a powerful decision-making tool. It has been the topic of a Ph.D. dissertation, a Master's thesis, and several articles. See: Eyre, Marcus. 1997. *The Role and Limitations of Indicators in Environmental Decision-Making; With an Evaluation of the Banff Bow Valley Round Table Process*. Master's thesis, University of Calgary, Calgary, Alberta, Canada; Jamal, Tazim. 1997. *Multi-party consensus processes in environmentally sensitive destinations: Paradoxes of ownership and common ground*. Ph.D. diss., University of Calgary, Calgary, Alberta, Canada.

Valley, one for each major stakeholder. These sectors included: Commercial Outdoor Recreation, Commercial Visitor Services, Culture, Environment (one sector for national representation and one for local), Government (federal, municipal), Infrastructure/Transportation, Park Users, Social/Health/ Education, the Task Force, and Tourist. In addition to these sectors, the Siksika and Wesley First Nations signed the Round Table's Procedural Agreement and attended some initial meetings,²⁷ and the Alberta Government observed the proceedings (BBVS Technical Report 1996). Ideally, the person sitting at the BBVS Round Table would report discussions back to their respective groups and try to represent his or her groups' interests fairly at the Round Table. The entrenched positions in the Bow Valley of "environmentalist" versus "developer" were difficult to get past at the Round Table and plagued the group especially early on in the process because of the "historical, temporal, and essentialist baggage" associated with these terms and positions (Jamal et al 2002). The main tasks of the Round Table were to "identify issues, provide public input toward a coordinated strategy for the region, develop a vision, and possibly develop specific action plans" (Eyre and Jamal 2006). The Round Table was only one source of input into the final study, albeit an important one, because its final recommendations based on consensus would be put into the final report of the Task Force. This system was implemented by the Task Force and by the Minister of Canadian Heritage as a way to resolve the conflict between stakeholders (Jamal and Eyre 2006).

²⁷ The First Nations groups withdrew from the BBVRT process because their issues were not included under the BBVS mandate (Hodgins et al 2000).

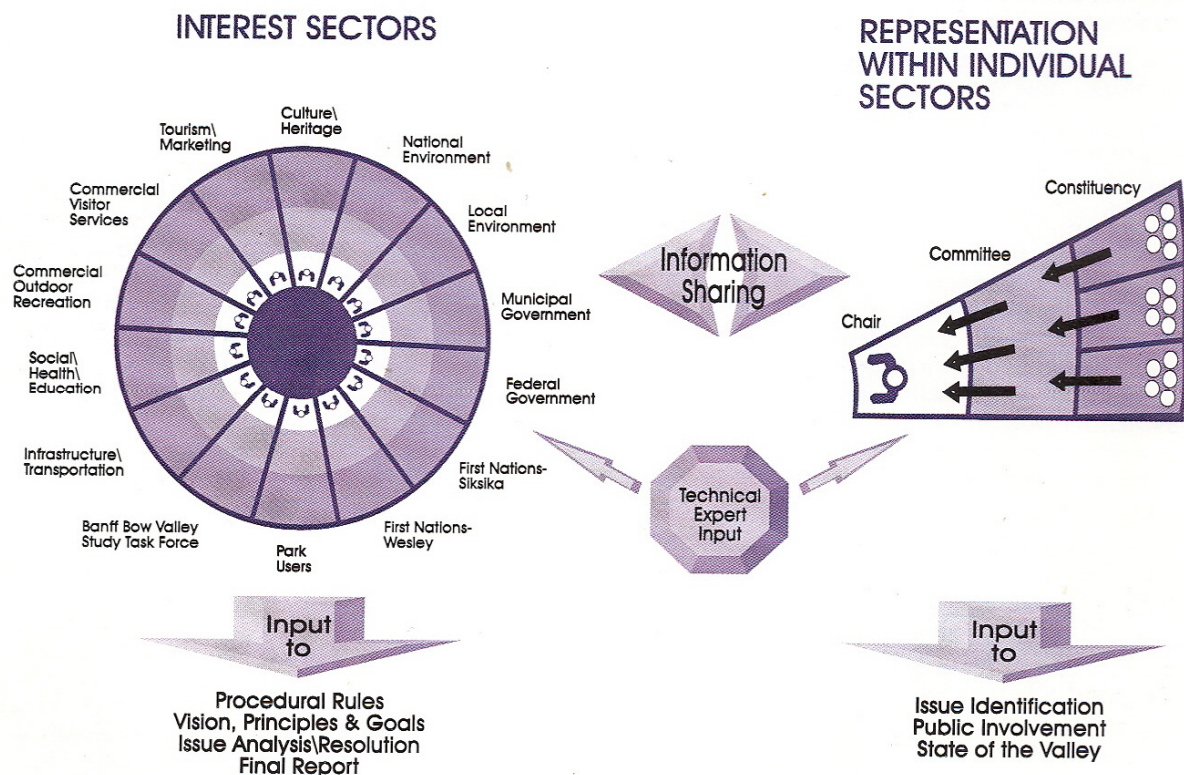


Figure 3.5: The BBVS Round Table (BBVS 1996:6)

Controversy and the Media

The BBVS was plagued with negative media attention throughout its duration and dealing with the media became an onerous responsibility. Page cited the fair representation from the local Banff *Crag and Canyon*, but was not pleased with the coverage from other newspapers on particular occasions (Page Interview 2008). One event that garnered attention was the discontent of the Association for Mountain Parks Protection and Enjoyment (AMPPE) and its withdrawal from the study in December 1994. Managing Director of AMPPE Dave Day wrote to the Canadian Heritage Minister Michel Dupuy: “our board has lost confidence in the honesty and objectivity of Parks Canada’s public participation process” (qtd. in Andreef 1995). The

group was troubled by comments made by Task Force members and other Round Table participants in newspapers such as *The Calgary Herald* and *Canadian Geographic*, in which Banff National Park was described as a “black hole.” Page saw this bomb dropped on Christmas Eve 1994 by the *Globe and Mail* as one of the most trying times dealing with the media and accompanying fallout with people involved with the study as it spread misinterpretation of comments and mistrust. Valerius Geist, a University of Calgary elk expert, described Banff National Park as “almost a black hole” in terms of what was happening in science because not much of this science was being translated into management actions, and the article misinterpreted this as being something akin to the Black Hole of Calcutta for Canada²⁸ (Page Interview 2008; Mitchell 1994). A succession of negative comments from environmentalists about the impact of development on the park angered many. Such comments included wolf scientist Paul Paquet’s: “It [Banff National Park] is definitely on the brink and may have gone over. In my assessment, it has gone over.” Chairman of the Task Force Bob Page responded at the time: “I felt the *Globe and Mail* article set us back, terms like the ‘black hole’ are offensive to me, it doesn’t represent the people in this community. It was one-sided—I’d spent most of the 45 minutes talking in a positive vein to the reporters. Most of what I had to say was forward-looking and dealing with ways the Bow Valley could come together to meet the challenges” (qtd. in Andreef 1995). Newspaper articles, in addition to attaching the moniker “Black Hole” to Banff, gave the impression to AMPPE that other sectors, specifically Harvey Locke of the

²⁸ The “Black Hole of Calcutta” refers to a small prison in Fort William, India that held British prisoners of war after their capture on June 20, 1756 by Siraj-ud-Daulah, the Mughal Nawab of Bengal. This attack was a result of the British East India Company’s refusal to negotiate new conditions of trade with Bengal. John Zephaniah Holwell, the magistrate of Calcutta appointed once the previous one had fled, was one of 146 prisoners held in the “Black Hole.” Of these prisoners only 23 survived their incarceration because of the harsh conditions, which have achieved mythical status and now the term “Black Hole [of Calcutta]” now “signifies a place to be avoided, somewhere overcrowded and overheated, a site of discomfort” (Teltscher 1996). The extent of the conditions were probably exaggerated in Holwell’s account, *A Genuine Narrative of the Deplorable Deaths of the English Gentlemen, and Others, who were suffocated in the Black-Hole in Fort-william, at Calcutta*.

Canadian Parks and Wilderness Society (CPAWS), a major player of the National Environmental Sector, were “winning and dining” (Andreef 1995) the press to make a good impression. This, along with the history of a poorly-designed and managed public participation process during the Four Mountain Parks Management Review led to AMPPE’s discontent and withdrawal from the study (Andreef 1995). Page said that the damage that this did to the public participation process took weeks to mend not just with AMPPE but with the Minister of Canadian Heritage (Page Interview 2008).

With AMPPE’s withdrawal from the study and the accompanying bad press, other groups began to feel uneasy about participating. The Banff/Lake Louise Tourism Bureau, which had been added to the study to help defuse some of the tension between AMPPE and other groups threatened to leave because of the controversial news stories. The Bureau’s Executive Director Greg Knight said that the bureau wanted “to be assured of the objectivity of the study” and to be sure of its credibility (“Tourism Bureau may ditch Bow Valley Study” 1995). AMPPE and others were agitated by further attempts to defuse the situation and by further statements made in the media. The Deputy Minister of Canadian Heritage visited Banff in December 1994 and asked that everyone in the study refrain from making comments in the media because of the importance of the BBVS not only to Banff National Park but for the other mountain parks. But Banff continued to receive negative press in the media in both television programs such as *The Calgary Eye Opener* and David Suzuki’s *The Nature of Things* (Rooney 1995). The Task Force responded to the situation by adding a tourism expert, which went a long way to alleviate AMPPE’s discontent with the public participation process. Gary Frey, the president of AMPPE, called it a good first step, and Bob Page addressed the concerns of the Banff business community: “Our slowness in delivering was part of the reasons for the suspicions that this was

not going to happen. Some of the tourist operations were concerned that we might not be doing this and that it was showing our bias toward the environment (interest groups)” (qtd. in Stirling 1995).

The Round Table Process

Once the concerns of AMMPE and the business community were addressed with the addition of a tourism expert and some other small modifications to the study, such as more support for the Round Table scientific advisory committee, the meeting of the Round Table and its work could begin in earnest (Rooney 1995b). The Round Table officially began business on February 11, 1995, with an opening address by the Heritage Minister, Michel Dupuy (Rooney 1995c).

The members of the Task Force had been working hard to recruit the participation of the provincial governments of Alberta and British Columbia. Since the study site was the Bow Valley within Banff National Park, and the BBVS was federally-mandated, the study did not have jurisdiction outside of federal lands. The Task Force felt that provincial areas should be included in the proceedings because of the impacts that BNP has on outlying land and vice versa, but the Alberta government did not wish to participate actively because of threats to their jurisdiction, power and authority. However, they did observe the proceedings (Green Interview 2008). Banff mayor Leslie Taylor disagreed with this level of participation: “I really believe there’s a major difference with liaising versus having someone at the table. I really believe that the work of the task force won’t be meaningful without the provincial buy-in” (qtd. in Andreef 1995b). The mayor of Canmore also called for wider participation in the study: “I think we have to think of this valley as one interdependent region from a social, economic and environmental point of view” (qtd. in Andreef 1995b). Initially, critics of the study also cited the very limited

participation of native groups, the Stoney and Siksika Nations, the youth, and other locals of Banff. The First Nations groups declined because of the highly political nature of their land claims on Parks Canada land, which were not addressed by the mandate of the study (Rooney 1995c). Despite this important absence, the Round Table would nevertheless hold influence because Dupuy promised to consider seriously implementing any recommendations made by the Task Force that were based on unanimous decisions of the Round Table (Rooney 1995c).

The first task of the Round Table was for each interest group to define their specific interests in the Banff-Bow Valley. Doug Cook, one of the Task Force members thought this process of defining interests was critical in getting past initial tensions and entrenched positions. For business and tourist interests, this also provided the critical chance to create consensus on what issues and goals they could agree upon and bring to the table (Jamal 2004: 367; Eyre and Jamal 2006). When sectors began to compare their interests, they noticed that there was actually some similarity between these interests, and some of the mistrust that had been building up between groups for years began to erode, which made further discussion on the Round Table between them at least possible (Cook Interview 2008). All of the members of the Task Force agreed that the Round Table process was vitally important to how the Banff-Bow Valley Study turned out.

Once each sector met separately to solidify its interests and goals, the first major task of the Round Table as a whole was to craft a vision statement for the Banff-Bow Valley that would “bring together ecological, social and economic values” for the valley’s future for the next 50 or more years (BBVS, Technical Report 1996: 19). Page commented in the Banff *Crag and Canyon*: “One of the things which has struck us in our work so far is that there is no common vision among the different stakeholders as to what the future of the park should be” (Rooney

1994). However, there *were* common themes among the various visions for the Banff-Bow Valley, and the creation of a common vision at the Round Table began to assuage some of the tensions between sectors, which had been at odds for the past several decades. For perhaps the first time, members of these disparate groups had to listen to where each other was coming from and their deeply-held values of the Banff-Bow Valley: “You don’t achieve a vision statement quickly and easily. It has to be a series of occasions where people get together to the point where they feel comfortable with each other and the ideological or economic defence mechanisms they have built up over the years begin to break down” (Page qtd. in Rooney 1994). The vision statement process was oriented toward what the Round Table wanted to see in the Banff-Bow Valley in the future: ““What do we as a society want to see? What do you envision the Banff-Bow Valley being in 50 or 100 years? What do you want to have here?’ And the nice part about that is it doesn’t take people very long to agree to what they want it to be. No one wanted this to be overbuilt. I don’t think anyone came back and wanted it to be pristine wilderness” (Green Interview 2008). Bob Page said: “It is the first time that a vision with supporting values and principles has been articulated for the valley by a representative range of interests” (qtd. in Rooney 1995d). This was done during the fall and summer of 1995 by an 8-person committee, and the resulting document was discussed and revised by the whole Round Table²⁹ (Banff-Bow Valley Study 1996: 19).

²⁹ Each member of the Round Table had a binder full of materials to aid in an informed discussion at the table, which included in the appendices, a “Reference List of Information Sources” updated as of January 3, 1995 and included: 1) 1979 National Parks Act, 1988 Amendments, Regulations; 2) 1994 Parks Canada Guiding Principles and Operational Policies; 3) 1988 Banff Park Management Plan and 1994 Update; 4) Angus Reid Survey: A Study of Canadian Attitudes Toward National Parks; 5) State of the Valley Report; 6) Town of Banff Incorporation Agreement; 7) Environmental Assessment Review Process Guidelines Order; 8) Canadian Environmental Assessment Act. (Round Table Working Book. 1995. Banff-Bow Valley Study. Canadian Parks and Wilderness Society, Calgary. Accessed 10 June 2008.)

The crafting of the vision statement was a major task for the Round Table and took from May to December 1995 to complete. This included the final vision statement, key themes, principles and values, which would guide further work done by the Round Table and Task Force and would eventually be included in the next Banff National Park Management Plan in 1997 (Jamal et al 2002: 167-172).

Although there could have been the tendency for the Round Table process to degenerate into spiteful bickering, the Round Table had at least one incentive to work together and try to achieve consensus: anything agreed upon by all sectors would automatically be included in the final report, including recommendations. However, even with this incentive some topics were quite controversial and discussion could get emotional and heated. Craig Darling played a large role in keeping the peace, speaking individually with sector representatives and their groups to iron out any issues (Green Interview 2008). Discussions centred around three main topics: ecological integrity, appropriate use, and community health. The commercial sectors often felt ill at ease with their understanding of the science presented to the Round Table and did not have the “social and visitors statistics of the park at their fingertips” to legitimize their statements and concerns (Eyre and Jamal 2006). The lack of data on the social aspect of life in the Banff-Bow Valley was an issue in the final report of the Task Force (Ritchie Interview 2008). “Though a consensus-based round table can help to even out power imbalances, it may also undervalue some interests while overrepresenting others” (Eyre and Jamal 2006). In the case of the Round Table, environmental interest groups had the upper hand because of their previous organization and strong grasp of scientific data presented to the Round Table. The commercial sectors were at a disadvantage because of their previously unaligned goals for the future of the Banff-Bow

Valley and their inability to understand the impact that various strategic goals could have on their own interests in the park (Jamal and Eyre 2006).

Ecological Integrity

One of the defining terms used in the BBVS and in discussion during the Round Table process was *ecological integrity*. It was defined for the Round Table participants by Tom Lee, the Assistant Deputy Minister, in a briefing on policy on September 20, 1995: “Basically we’ve arrived at a statement that ecological integrity means a condition where the structure and function of an eco-system are unimpaired by stresses induced by human activity and it’s a condition in which the natural conditions are likely to persist” (Round Table Working Book 1995). This definition closely follows the one found in the 1994 Parks Canada Guiding Principles (Canadian Heritage 1994). Many Round Table participants found Tom Lee’s discussion of Parks Canada’s mandate and ecological integrity helpful at the time. However, a business participant in the Banff-Bow Valley Round Table expressed his concern with the framing of the study through the lens of ecological integrity after the study was completed:

As Tom[Lee] (assistant deputy minister)says, *it’s not a dual mandate, it’s one mandate, you know, a multifaceted role for the Park*. The science has got to acknowledge that going in. . . . We’ve got a national transportation corridor. We’ve got Canada’s premier tourism destination, a recreational area that’s fundamentally important to Western Canadians, we’ve got to *face reality* here, and it’s really only crystallized after the fact [and?] what we should have been saying and perhaps delivering a message, you know, the message there *is that’s the reality*; how do you deal with it? And instead the Bow Valley Study addressed it from *ecological integrity [which] means this, this place doesn’t*

have or is unlikely to have ecological integrity and therefore we have to shut the doors.

(qtd. in Jamal et al 2002:170)

Some sector representatives were uncertain of the use of the concept “ecological integrity” because they did not know exactly what that meant in terms of tourism. There was a perceived risk that their businesses would be harmed by stressing this concept (Jamal et al 2002).

Appropriate Use

Closely tied to the concept of ecological integrity was the discussion of what constituted appropriate human use in the Banff-Bow Valley. The BBVS acknowledged the question of appropriate use as something which science alone could not dictate, but mainly as something that is mostly decided as a result of human interests but which should consider impacts on nonhuman nature through the rhetoric of ecological integrity. “The Banff-Bow Valley Round Table has concluded that resolving the issue of ‘appropriate use’ is central to the management of human use and development in a manner that will maintain ecological integrity of Banff National Park and provide for sustainable tourism” (Memorandum “Re: Appropriate Use Negotiation,” 14 November 1995, Round Table Working Book 1995). An early definition of appropriate use can be found in the 1911 National Parks Act: “There will be no business there except what is absolutely necessary for the recreation of the people.” The BBVS was continuing in the same vein started with the *Guiding Principles and Operational Policies*, which prohibits new communities, golf courses or expansion of existing golf courses, and commercial ski areas (BBVS Technical Report 1996:27). Ritchie (1999:109) found that the BBVS was by no means definitive in all respects and that there are still several areas that require further research and thought:

What it did not point out, however, is that we have a very poor understanding as to what kinds of park visitation and associated behaviours are truly detrimental to the ecological integrity of the park. The Behavioural Research Project, conducted by the Task Force, started out to examine which types of behaviours needed to be eliminated or managed so as to provide optimal levels of visitation and activity while maintaining ecological integrity. This question was only partially answered and should be a very high priority for future research. While ‘narrow’ stakeholders such as residents of the Town of Banff, as well as Tourism operators in the region, cannot be ignored in policy formulation, the fact that Banff is a ‘National Park’ requires that these narrow interests be largely subjugated to the broader interests of the total citizenry. (Ritchie et al 2002:299)

Here Ritchie is critical of narrow, local interests, which have a big role in defining the use of a national space. Bayley (2008 Interview) also considered the sticky issue of appropriate use and its definition:

Why do we need a Banff Centre for the arts? Does U of C [University of Calgary] want to have a campus in Banff? These are the pressures that are facing it [BNP]. [...] Should we have a casino? Everybody agrees we should have no casinos. How about the ability to have weddings? What about the ability to have conferences on science? Well, conferences on science are ok, but what about the insurance brokers of Canada?...And so the issue of appropriate use and how much and what one should have is very difficult for Parks Canada to determine. If they use a narrow definition, then not much is appropriate.

Bayley also points out how the allowance of activities in BNP that are only loosely related to its mandate could be a slippery slope for Parks Canada.

Sustainable Tourism

While community health was listed as the third main topic of discussion, much of the time allocated for it was used to discuss sustainable tourism. The Municipal Sector of the Round Table came up with this consensus definition of sustainable tourism: “Sustainable tourism in the Bow Valley of Banff National Park is a quality unique experience for the visitors that enhances their exposure to and connection with the national park experience of wilderness and wildlife. The experience is managed in such a way that ecological integrity is preserved for all time (or, if necessary, restored), a healthy economy is maintained in perpetuity, all the way ensuring a beneficial quality of life for residents. While this concept is based upon an established vision for the Valley, monitoring and self-correction allow the concept to evolve” (Memorandum 12 July 1995, “Re: Further Tourism Definitions,” Round Table Working Book 1995). With the 1994 *Guiding Principles and Operational Policies*, Parks Canada presented a more sympathetic leaning for tourism (BBVS Technical Study 1996: 26). Some participants involved in the Round Table process felt that the “human experience” was missing from many discussions, which focused on ecological integrity for the most part. The Task Force recommended the development of a heritage tourism strategy for the park (an initiative already started before the BBVS). This concept allowed for stories about historical and contemporary human presence in Banff National Park and for the importance of maintaining ecological integrity for the benefit of future generations (Jamal et al 2002:172).

Despite the complexity, disagreements and controversy, the Round Table managed to produce some thoughtful compromise and consensus-based decision-making, which did indeed achieve the goal of calming the conflict between environmental and development interests in the Banff-Bow Valley, especially in the short term. The Round Table stated that: “the shared

decision-making process adopted by the Table was slow and difficult. Moments of frustration encompassed everyone involved, but were countered by hard work and good faith...hours of exploring differences in a search for agreements have allowed participants to gain a better understanding of what is truly important to them and to others” (qtd. in BBVS Technical Report 1996). The Round Table finished up its work June 30, 1996 (Andreef 1996).

Other Projects

At the same time that the Task Force was engaging the Round Table in discussion of the vision statement, ecological integrity, appropriate human use in the Banff-Bow Valley and other issues, there were a number of projects, reports, and side studies being done by the Secretariat, consultants and other experts. One major area of work for the Round Table that also contributed to better understanding between sectors and a better understanding of the Banff-Bow Valley in general was the production of the State of the Banff-Bow Valley Report (1995). The Secretariat organized information on the current ecological, social and economic state of the Banff-Bow Valley in a report for the benefit of the Task Force and Round Table. It included a brief history of BNP, an examination of the ecosystem, an overview of the human socio-economic situation of the valley including tourism and other commercial activities, and an integrated perspective of the valley including ecological, social and economic aspects. The Round Table was invited to critique the information, and over 10 months the Round Table went through several drafts of the document (Hodgins et al 2000: 285-6). Craig Darling, the mediator of the Round Table, described the result of this process of revision as “a significant contribution to providing a source of baseline information. The document is useful in bridging communication gaps, and in developing a common understanding of the area” (qtd. in Hodgins et al 2000: 285).

Another major project of the Task Force was the Ecological Outlooks Project (EOP), which was to provide a scientific basis for management recommendations. This project included two sub-projects: the Cumulative Effects Assessment (CEA) and the Futures Outlook. The CEA looked at the changes in the park from 1950 to the newest changes. The Futures Outlook used modelling to examine several future growth scenarios to see what sort of changes there could be to ecological, social, and economic life in the valley. The Round Table was thoroughly involved in these projects and nominated members to a Scientific Review Committee that reviewed the scientific work produced (Hodgins et al 2000: 285).³⁰

Access to data on social and economic aspects of life in the valley was limited because there had been less research done in that subject area previously, and the BBVS Task Force did not have the time or funds to do all of the research to fill gaps, which included such topics as visitor behaviour and patterns and the social life of communities like the Town of Banff, Hamlet Lake Louise, and communities near park boundaries such as Canmore. Some groups that did not approve of the BBVS even withheld relevant data until the end of the study (Hodgins et al 2000: 285; Ritchie Interview 2008). The BBVS did conduct a survey of trail users, a survey about recreation and leisure activities offered in Banff, and a survey of tour operators asking some of the same questions related to visitor satisfaction and which type of activities were pursued (Hodgins et al 2000: 285). A Tourism Outlook Project (Coopers and Lybrand Consulting 1995) was also completed to understand trends in tourism and how they were affecting the Banff-Bow Valley.

³⁰ Laura Cornwell (2004) provides a good discussion of the modelling process used in the BBVS and its role at the Round Table in: "Future Planning: Banff National Park." In *Mediated Modeling: A System Dynamics Approach to Environmental Consensus Building*. Edited by Marjan van den Belt. Island Press, Washington:164-186.

Putting Pen to Paper: The Writing Process

In December of 1995, Bob Page announced that the writing of the BBVS final report would begin April 1, 1996, and he expressed his optimism about the progress of the BBVS process (Rooney 1995e). “It’s the sobering reality of actually putting words on the page and knowing they have to stick. You’ve got to make sure everything is well-documented and well-balanced” (Page qtd. in Andreef 1996b). On October 7, 1996, the final report of the Task Force, *Banff-Bow Valley: At the Crossroads* was released. This 430-page technical report, supported by over 20 reports and analyses, examined the state of the Banff-Bow Valley and gave over 500 recommendations from the Task Force on changes that should be made to improve the ecological, social, and economic state of the valley (Hodgins et al 2000:282). One of the main findings was that ecological integrity was impaired by the current situation of human use and development in Banff National Park. Reactions to the report were immediate and varied across the board from agreement to discontent and complete disagreement especially as specific stakeholders were affected by direct and indirect implementation of these recommendations. In the next chapter, we turn to the reception of the recommendations and the politics of implementation.

Chapter 4: The Aftermath—Public reception and government (re)action

Recommendations: Immediate reactions and Implementation

“If we don’t get our act together today, we won’t have a park in 50 years,” said Sheila Copps, Minister of Canadian Heritage, on October 7, 1996, the day that the Banff-Bow Valley Study’s Technical Report was released by the Task Force. “Starting immediately, no new land will be made available for commercial development in Banff National Park” (qtd. in Rooney 1996b:1-2). The BBVS called for drastic change in BNP, placing the environment as a priority over business and calling the Town of Banff and overdevelopment in the park an “anomaly” in the Canadian national park system (Kopas 2007:153). Reactions to the approximately 500 recommendations were strong and swift. Special interest groups proved particularly outspoken and felt that their interests were being ignored or stepped on by specific recommendations. This made the implementation process as fraught with conflict as the BBVS process itself had been. From the beginning, it was clear that not all of the recommendations would be implemented. However, a good number did make it through the gruelling process of public scrutiny and the politics and logistics of implementation, and the principles behind them were adopted throughout Parks Canada’s policy in Banff National Park and beyond into the Canadian parks system in various management plans, the Panel on Ecological Integrity and the new 2001 National Parks Act.

The recommendations put forward by the Task Force were very specific. Suzanne Bayley explained the reasons for the decision to make the BBVS so detailed:

[...] the other thing that I think was unique, from our perspective, is the previous commissions and advisory groups that had worked on Parks Canada. We laid them out

in front of us. They had made very general statements like ‘protect ecological integrity,’ ‘protect this or protect that,’ but very general. We looked at that, and we saw that it didn’t work, so we are going to give them something specific. Burn zone Carrot Creek between this set of years and this set of years because if you don’t make it specific, everybody adapts the generalities and says they’re doing it. (Bayley Interview 2008)

The Task Force hoped that by being specific their recommendations would be implemented and that there would be little room for misinterpretation of the Task Force’s intentions. However, by doing this, several stakeholder groups with specific interests and users of BNP felt singled out, such as the anglers and pilots.

Recommendations were based on indicators derived from the existing scientific literature and from commentary made at the Round Table. Bayley attributed the existence of much of the current research to the work of Cliff White, a long-time employee of Parks Canada, who had to contend with a tight research budget. White skirted the budget problem by having graduate students do research in BNP rather than by hiring consultants to do the work (Bayley Interview 2008). The type and scope of this research certainly influenced and aided the BBVS process and recommendations by providing a base of scientific knowledge with which to grapple. Jeff Green, another member of the Task Force, was pleased overall with the degree of recommendation implementation: “We knew we were reaching pretty far, but it’s been quite remarkable in terms of fire management, wildlife, people management to protect wildlife, and those sorts of things. The wildlife corridor one, I think, is really remarkable” (Green Interview 2008). Doug Cook also was also pleased with the recommendations put forward:

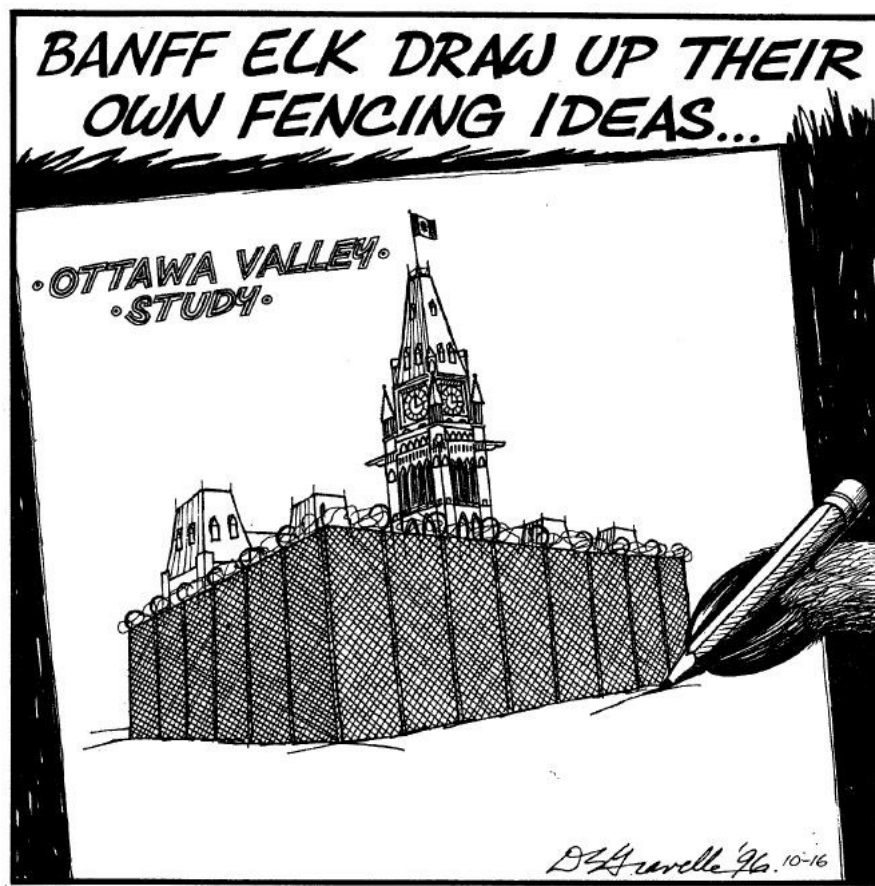


Figure 4.1: "Ottawa Valley Study: Elk Draw Up Their Own Fencing Ideas." This editorial cartoon in the *Banff Crag and Canyon* pokes fun at the backlash of the BBVS recommendations and suggests that perhaps wildlife, another "stakeholder" group might also object (*Banff Crag and Canyon*, 9.October, 1996).

I was quite comfortable that we had done a more than a satisfactory job in developing the background and the rationale for each and every recommendation, and that those recommendations hum together as an overall story. The issue when you make 550 recommendations is that you need some kind of an elevator story, and what is an elevator story? You get on an elevator and there's the CEO of a company, and he asks you, 'how're things going with Project X?' And you know that you only have one-fifth of a second to answer because the door's going to open again, and he's going to be gone. So you have to put together a very quick summary that gets the story across of what you're trying to do, not to give him 550 recommendations to swallow all at the same time. And

that's what I worked on at the end, what's called "the case." What is the case for Banff?
[...] That essentially, you boil down the key elements of what we were trying to do and
what our recommendations were. (Cook Interview 2008)

Directly after the BBVS report was released, only a summary, and not the full technical report, was available, making the "elevator story" essential in the reception of the report. This was problematic because the summary did not provide all of the details and rationales behind recommendations and conclusions made by the BBVS Task Force. In order to correct any misunderstandings or miscommunication as a result of incomplete information or opinions of the BBVS based on the summary report and media reports, the Task Force met with many stakeholders to clarify the recommendations (Hodgins and Cook 2000: 39). Copps announced several immediate changes that she would enact without further consideration, mainly the removal of structures, such as the national cadet camp, the airstrip, corrals, barns and buffalo paddocks. These and other immediate changes accounted for approximately 10% of the BBVS recommendations. Copps was serious about correcting and mitigating many of the impairments to ecological integrity in Banff National Park and vowed to consider more wildlife overpasses and other ways to restore ecological integrity (Mitchell 1996). Another major recommendation was a cap on the population of the Town of Banff at 10,000 (Green Interview 2008). A follow-up advisory board was put together to decide on the feasibility of specific recommendations. This group included: former Banff mayor Leslie Taylor, Brewster Transportation president David Morrison, former CPAWS president Harvey Locke, former TransAlta Utilities chief executive officer Ken McCready, and Task Force Chair Bob Page (Rooney 1996b: 1-2). The Implementation Advisory Committee had little interaction with the Task Force beyond Bob Page (Hodgins and Cook 2000: 39). One of the most outstanding and bizarre recommendations was to

put a fence around the Town of Banff in order to reduce human-wildlife conflicts, which had become problematic in the early and mid-1990s with elk moving into parts of the town to escape a growing and encroaching wolf pack. Suzanne Bayley said that the idea came from bear specialist Stephen Herrero, who had spent time in Africa, where they “do it to protect people from wildlife. Here we ought to do it to protect the wildlife from the people” (Bayley Interview 2008). Although the Task Force believed that all of the recommendations would be beneficial to BNP if implemented, “there were some other things that we knew were very radical that were unlikely to get implemented like some of the outlying, long-term purchases in the buying out of external hotels” (Green Interview 2008). Despite the infeasibility of implementing some of the recommendations and strong opposition to some, at first glance, quite a few were put into action. Bob Page, Task Force chairman, described his impressions: “We had almost 500 recommendations, and I think three or four years later Jillian Roulet [BNP Superintendent at the time], who’s a marvellous lady—she told me that two thirds of the recommendations had either been accepted and implemented or accepted and were in the process of being implemented” (Page Interview 2008). However, the process of implementation was one fraught with political conflict and controversy, and opposition was readily represented in the media.

The Implementation Advisory Committee held an open house in Banff in late January 1997 to communicate their findings with the public, debrief the BBVS Round Table, and then send in its final recommendations by April 1 for the 1997 Banff National Park Management Plan (McArthur 1997:F1). A debriefing of the Round Table may have been necessary since many of the recommendations in the Task Force’s final report went beyond what was discussed during the Round Table sessions because of time and budgetary constraints. This was a cause of surprise for many of the Round Table participants (Hodgins and Cook 2000: 25).

The BBVS and the Town of Banff

Described as an “anomaly” in the BBVS, the Town of Banff has a unique and interesting position as a settlement in the first Canadian national park: “Banff has been something of an anomaly in the modern parks system because it embodies so strongly the economic development model while, progressively, the policy and most of the rest of the system have been aligned in favour of environmental protection” (Kopas 2007:153). Tensions between the newly-incorporated Town (since 1990) and federal (park) management were ubiquitous and brought out by the recommendations made concerning the Town, especially when seeming to sacrifice the community in favour of the park:

Since the 1988 amendments to the National Parks Act, increasing priority has been accorded to the ‘ecological integrity’ of the Park, as opposed to ‘visitor enjoyment’ or ‘community well-being’. This realignment of priorities has not always found favour with recreationally oriented visitors. It has also aroused the ire of certain members of the Banff community, particularly many who were instrumental in obtaining greater governance autonomy for the town via a 1990 agreement that set out the terms of incorporation of the town. (Ritchie 1998:294)

Ted Hart, the mayor of the Town of Banff at the time, was opposed to many of the recommendations: “Recommendations that speak of providing basic services and less support for community infrastructure, social services and commercial recreation facilities cause me a great deal of concern because, if implemented, they would make us less community oriented” (qtd. in Rooney 1996b: 1-2). BBVS Task Force member Doug Cook believed that community concerns were driven by threats to businesses that did not fit within park boundaries:

Essentially, the Town wanted to continue to expand and was not prepared to build inside its own limits. Also there were a lot of businesses in Banff Township that had no business being in there. For instance, there was a BMW dealer. And there was another lady, in the medical field, I think it was cosmetic surgery, and she advertised all over North America that you could come to Banff Town, and then have your cosmetic surgery, and then relax and recuperate in the Town. Well, that had nothing, absolutely nothing, to do with Banff as a tourist destination. (Cook Interview 2008)

This harkens back to Banff's origins as a health spa, but the viability of this use has since been put into question by the Task Force and other groups. Initial community concerns were mollified by the Deputy Assistant Minister Tom Lee, who commented, "it would be business as usual for the Town of Banff" (qtd. in Rooney 1996c: 1-2). "Business as usual" meant the town's current boundaries would not be altered. The Town had been asked to cap its population at 10,000. However, this was no great imposition since this limit was already envisioned by municipal plans since 1989, which sought to maintain the small town community feel of Banff (Rooney 1996c: 1-2). By November, some of the more controversial recommendations were already being shoved aside and not seriously considered. Sheila Copps was going to disregard proposals to changes the Town of Banff's incorporation agreement, plans to stop the Middle Springs development, and anything related to health, education and recreation changes (Zickerfoose 1996). Ted Hart's remarks about the BBVS led to a minor dispute between him and Task Force chair Bob Page, who defended the work of the BBVS and cited the importance of its applicability to other parks (Bachusky 1997b: 2). Controversy over the findings of the Task Force and development in the Town of Banff continued to brew and came to a head within

the first few years after the BBVS was released, which will be discussed later on in this chapter. We turn now to the reception of the BBVS by specific interest groups.

The BBVS and Its Reception by Interest Groups

Specific interest groups also felt wronged by recommendations, which threatened their interests directly. Feeling singled out, these groups often reacted with hostility and fought back. Blaming other groups or citing other issues in the park were common responses. Hotel owners felt that the implementation of some recommendations would adversely affect business (Burke 1996: 3,11). Task Force member Brent Ritchie felt that satisfaction with the report was tied to the level of participation in the process:

The industry, the tourism industry, really didn't take the process as seriously and politically as it should have, and then when it was all finished they were surprised at some of the recommendations, and it was only because they didn't participate. The environmentalists were much more represented in the community. Not many people appreciated what might come out of it. Nothing was entirely negative, but they should have been more involved in it. (Ritchie Interview 2008)

There were also some hard feelings from many in business, especially those connected with outlying commercial accommodations, those hotels and other visitor accommodations outside of Banff and Lake Louise within the park, which were tied up in various, complicated forms of ownership. Jeff Green, a member of the BBVS Task Force described what may have been the reason for a negative response to recommendations concerning their activities:

They clearly see that they have a tenure on the land-base and that's worth more to them and that they have the right to develop, and so when we placed restrictions on them, they

see that as being a restriction on business. I think any business would think that unfair. [...] There was a couple of the big hotels that saw immediately that [...] by protecting ecological integrity you're protecting the very asset that most people want to come to your hotels for and that noting that you protect ecological integrity, you're going to make your exclusivity even greater" (Green Interview 2008).

Green went on to cite the example of Melina Lake Lodge, which had already adapted to a similar style of management, capitalizing on its attention to sustainability. They took their advertising budget and devoted most of it to a nature interpretation programme (Green Interview 2008). The BBVS did take business interests into consideration and believed that sustainability-focused ventures were relevant and acceptable within the national park context, but those businesses that did not integrate ecological protection were not as welcome (Kopas 2007: 152-153).

The BBVS also drew attention to the problem of aquatic ecological health, and the Upper Bow Valley chapter of Trout Unlimited was incensed by plans to eliminate fishing in some streams of Banff National Park. The reason for this was the BBVS proposal to protect and reintroduce bull and cutthroat trout. One member, Doug Manchuk said: "Down the road, we should also look at things like skiing and golfing in the national park. Let's look at everything. You can't just pin point one area" (qtd. in Ellis 1996a). The funny thing was that not just one thing was being pinpointed by the BBVS, but everything was being scrutinized and reconsidered, leaving few people without qualms or critiques. The president of Trout Unlimited remained unconcerned and considered the elimination of fishing in the park unfeasible (Ellis 1996a).

AMPPE, a participant and critic during the course of the BBVS process, again critiqued the BBVS with the release of the final report for being "unrealistic" and a "doomsday scenario for Banff National Park and creates a false sense of urgency" ("Doomsday study" 1996: 15).

One example in point was the estimate that by 2020 the visitor count would grow to 19 million per year if left unchecked (“Doomsday study” 1996: 15). During the time of the study, visitation levels stood at 5 million people per year and were seemingly growing (BBVS 1996). On this count at least, AMPPE seemed to be correct. Since the BBVS, visitation has not increased as the Task Force predicted it could have done, but rather has fallen to 3,297,460 visitors for the 2006-2007 season (Parks Canada 2007).

Other groups were more willing to work with and accommodate the requests that the recommendations made of them. One recommendation called for Canadian Pacific Rail to study ways to reduce wildlife mortality and to clean up grain spills on the CPR immediately after they occur (“CP Rail” 1996: 20). “CP Rail, in cooperation with Parks Canada, should fund research on methods to reduce wildlife mortality and other impacts on wildlife. New measures which prove effective should be implemented” (BBVS 1996:193). Stephen Morris, a CP spokesman, responded: “I think we’ve already achieved what they’re asking” (qtd. in “CP Rail” 1996:20). CP Rail has already established a series of escape routes for animals at common spots of mortality, and the company used a vacuum truck to get rid of grain spilled on the track (“CP Rail” 1996: 20). Parks Canada and CP Rail did go on to form a joint committee to deal with wildlife mortality on the line, addressing issues of habitat and grain spills (Ellis 1997e: 7).

In 1997 discussion surrounding implementation became more serious. Sheila Copps visited Banff on January 13 to address continuing concerns about the BBVS recommendations. But even early on, it became apparent that many of the recommendations would face trouble, and the *Calgary Herald* reported that about half of the 500 recommendations would not be implemented, including hiking quotas and the closing of the Bow Valley Parkway, mostly because of strong public reaction and minimal resources (Andreef and Stewart 1997).

The BBVS also caused the formation of oppositional groups such as the Preserving the Access, Recreation and Tradition of the Bow Valley Parkway, or P.A.R.T. (Ellis 1997a: 1-2). The BBVS recommended the closure of the Bow Valley Parkway (Highway 1A) because it cut through high quality habitat for many wildlife species, including grizzly bears, bighorn sheep, mountain goats and elk. It also acted as a wildlife corridor for wolves and other large predators. P.A.R.T. argued that the Parkway was causing negligible wildlife mortalities and that closure was not necessary. The Parkway was also used by some tourist companies to provide seniors and the physically disabled with easier access for wildlife viewing. It could act as an access route in case of a major accident on the TCH (Ellis 1997a:1-2). Soon after the group's formation, the federal government decided that the Parkway would not be closed during the winter. On January 25 and 26, 1997, Parks Canada held public meetings on the BBVS, and Tom Lee, Parks Canada's assistant deputy minister, said that Parkway was the "single item of most concern to this community" (qtd. in Bachusky 1997a: 1,3). It was becoming clear how unpopular an idea it was, and the closure became increasingly tentative. BNP Superintendent Charlie Zinkan discussed the adverse response with the *Crag and Canyon*: "It's all too early but I haven't heard anyone complimenting that idea (closing the parkway), to be blunt. Some of the environmental groups spoke to me earlier in support of it because they believe that it's an important initiative in terms of effective habitat" (qtd. in Bachusky and Ellis 1997: 4). Peter Swain, the manager of White Mountain Adventures, an interpretive tour company, gave another reason for the parkway's closure: "The only reason they're closing it is because they don't want to snowplow it any more" (qtd. in Bachusky and Ellis 1997:4). The new park plan incorporated the views expressed at the January 1997 meeting and compromised by making the closure of the parkway partial and voluntary (Ellis 1997d: 1-2).

Perhaps the second most contentious recommendation concerned the closure of the airstrip. The BBVS recommended that Parks Canada: “Remove all the built facilities along the lower slopes and the valley floor near Cascade Mountain” (BBVS 1996:193) for the purpose of restoring habitat and wildlife movement through the area. This meant removing Parks Canada’s corrals, the public corrals, the buffalo paddock, the Banff air strip, and the cadet camp. The closure of the airstrip had been recommended officially since 1988 management plan, but was not removed until the release of the BBVS (Mitchell 1997a). The Banff Flying Club wrote to MPs to keep the airstrip open as a safe landing site. The club’s president, Bernie Schiesser, refused to believe the idea that the airstrip hindered wildlife movement: “The evidence clearly shows the airstrip does not hinder wildlife movements or limit forage areas. The real blockage to wildlife movement is the Trans Canada Highway fence” (qtd. in Ellis 1997b: 10). The Banff Flying Club did not just write letters but defied Parks Canada orders to remove its aircraft and equipment as an act of civil disobedience and protest (Ellis 1997c: 3). The Canadian Owners and Pilots Association sued the federal government to keep the airstrip open for safety reasons, saying that pilots stuck in bad weather would have to land on the Trans Canada Highway without a proper landing area set aside (Mitchell 1997b). Eventually, the club was forced to leave, and the airstrip became a part of the Cascade Mountain wildlife movement corridor. However, in 2008, the airstrip was re-opened after 11 years. An Air Safety Risk Assessment showed a need to keep the Banff and Jasper airstrips open for emergency and diversionary landings (Duncan 2008). This demonstrates the constant negotiation and renegotiation of management in Banff. Nothing is final or set in stone.

Environmental groups on the other hand were generally happy with the recommendations made by the BBVS but were concerned with the implementation. Mike McIvor of the Bow

Valley Naturalists expressed this concern: “I guess I’m concerned that I don’t see the processes in place for accountability. I’m frankly concerned that those people responsible for the decisions that produced a situation that required a two-year \$2 million study are the same people making decisions supposedly to correct that problem” (qtd. in Bachusky 1997a: 1,3). No direct blame was placed by the BBVS Task Force for the ecological impairment of Banff National Park, but BBVS chairman Bob Page said that: “What failed to protect the park is a whole series of ad hoc decisions” (qtd. in Mitchell 1997d). Harvey Locke, president of CPAWS, which was a real force in getting the BBVS started, said: “I won’t click my heels and say it’s perfect, because it isn’t, but it is some meaningful movement and direction. It’s what we really need to see here, to get Banff back in the family of national parks” (qtd. in Andreef and Stewart 1997). The response of environmentalists was to wait and see if and to what extent recommendations were implemented.

Parks Canada Response

Another vital stakeholder and the manager of BNP, Parks Canada, responded to the BBVS with a 30-page report addressing 350 of the 500 recommendations (Bachusky 1997a:1,3; Parks Canada 1997a). The report provided Parks Canada’s vision for the Bow Valley, which had a definite ecological focus, and then addressed specific recommendations and how Parks Canada planned to approach them. The response looked at BNP as a place for nature, of cultural significance, for visitors, heritage tourism, community, open management, and environmental stewardship. The next steps for Parks Canada included putting together the 1997 BNP Management Plan, which would be forwarded to Minister Sheila Copps for approval. Then an environmental impact assessment would be conducted to assess the cumulative effects of the plan (Parks Canada 1997a). Many of the recommendations of the BBVS were incorporated into the 1997 BNP Management Plan, including a legislative limit on commercial development and the removal of some facilities, both of which had been promised by Copps (White and Hart

2007: 87, 193). The 1997 BNP Management Plan was released in April, and would potentially be in use for up to 15 years (i.e. until 2012). In the introduction to the management plan, Minister Sheila Copps wrote:

The Banff-Bow Valley Task Force was formed because we needed to change the ways we did things in the park. We needed to find a new common ground on which Canadians could build a new future for the park. After more than two years of extensive research, consultation and discussion, the Banff-Bow Valley Study was released, and many of its recommendations are incorporated here in the new park management plan. The Study made a unique contribution to helping us better understand the role that science plays in making our decisions. And it also made a unique impact by getting people involved, through the Banff-Bow Valley Study Round Table, in defining what the future of Banff should be. We are going to build on those foundations. The Banff-Bow Valley Study will continue to be a source of inspiration for decades to come. Its conclusions were reached by looking 50 years into the future and trying to picture what the park should look like. This is how we should ensure the future of the park. (Parks Canada 1997b: Introduction)

Not only were many of the recommendations of the BBVS incorporated into the BNP Management Plan, but the format and many of the comments included in Parks Canada's initial response to the BBVS are included in the Management Plan and expanded upon. The 1997 BNP Management Plan was not only important for Banff, but had a national impact because its updated framework was adapted for many other national parks across Canada almost immediately (Bayley Interview 2008). An important aspect of the BBVS recommendations to take into consideration is that they were meant to be implemented over the 25 to 50 years after the BBVS was released (Dempster 1996), so we are still relatively early in the supposed

implementation of these recommendations. That being said, it does seem unlikely that some of the recommendations will ever be implemented if they have not been already.

One important response to development in BNP was the creation of the OCA (outlying commercial accommodation) Panel in 1998. Their role is to make recommendations regarding OCAs, commercial accommodations in the mountain parks that lie outside of town sites (Parks Canada 1999:6-10).

Parks Canada continued to utilize stakeholder processes in its decision-making activities (Bayley Interview 2008), notably with the 1999 Annual Planning Forum, which included 16 groups and focused on human use in the park. They were particularly concerned with the recent decision to limit ski hill operations and outdoor tourism (Babin 1999).

A number of subsequent participatory initiatives show that the parks agency acknowledges the range of values held by different parties and the need to work co-operatively. In addition to various directives and guides being developed for monitoring and managing the park's ecological domain, strategic initiatives have been proposed for building partnerships with the Aboriginal people and to build common ground with the tourism industry. An accord outlining principles to guide collaborative action between Parks Canada and the Tourism Industry Association of Canada was signed on 4 January 2001, aimed towards fostering sustainable tourism planning, education and practice. (Jamal 2004:373)

Parks Canada is also helping to implement a Heritage Tourism Strategy for Banff National Park developed by the community-based Bow Valley Heritage Tourism Working Groups (Parks Canada 1997b; Sandford 1997). Jamal (2004:373) offers an analysis of Parks Canada's management of BNP since the BBVS:

These preliminary actions and initiatives offer hope that the momentum commenced by the BBVRT [Banff-Bow Valley Round Table] and BBVS is continuing through to improved organization and administration of the sustainability domain of BNP. It appears, at least, to have enabled the park administrators to take a stronger lead in dealing with the ecological challenges emphasized by the 1996 Study report and by the subsequent report of the 1998 expert panel on ecological integrity. (Jamal 2004: 373)

The issues of the BBVS and its concern for the maintenance of ecological integrity persist. The next section discusses some of the wider ramifications of the BBVS and its findings.

Challenges to New Management and Policy

Less than a year after the 1997 Banff Management Plan had been approved, one of its central management recommendations was seriously tested. A new, more transparent approvals process was put forward for development. However, it quickly came to light that Minister of Canadian Heritage Sheila Copps and CP Hotels had been discussing the possibility of the transfer of some CP land leases in Banff National Park and in Field, British Columbia, in exchange for the allowance to build a convention centre in Lake Louise. A briefing note for a February 4, 1997 meeting between Sheila Copps and Robert DeMone, chairman of CP Hotels read: "Parks Canada is interested in the surrender of some of the CP lands adjacent to the Château and within the village of Lake Louise as part of the approval for the Château Lake Louise meeting facility. CP Rail holds title to nearly 50 per cent of the land within the town boundary in Field, B.C. Parks Canada is currently developing a framework for the future development in the town of Field" (qtd. in Mitchell 1997d). The 1997 Banff Management Plan included a chapter on open management, on the need for a more transparent approvals process for new developments in the park. Suzanne Bayley, a member of the BBVS task force said in response that: "One of the things we felt was that all businesses should be treated equally, that

there should not be preferred ones and lesser preferred ones” (qtd. in Mitchell 1997d). The deal being struck between CP Hotels and the federal government seemed to be an example of preferential treatment because of the bargaining power that CP had with their leaseholdings. Jim Butler, a professor at the University of Alberta, said: “The concern in my mind is how the meeting facility fits into celebrating the intrinsic values of Banff National Park” (qtd. in Mitchell 1997d).

Another major test of the newly released BBVS and 1997 BNP Management Plan was Banff’s 1997 municipal plan, which sought to increase the area devoted to commercial development by 25%, adding 850,000 square feet. The 1997 plan would have allowed for 2.45 million square feet. Environmental proponents protested, and Sheila Copps objected: “The commercial proposal in and of itself would create a town without a soul” (qtd. in Mitchell 1997a).

Epilogue: Ecological Integrity and Impacts on Legislation in Canada

Some of the same concerns for the World Heritage status of BNP that prompted the BBVS continued after the study was completed. Commercial development in BNP remained a topic of discussion for the World Heritage committee, and Banff was put on the watch list, a precursor to being de-listed. If Banff were to be de-listed it would be “an international global embarrassment” according to Jim Butler of the University of Alberta (Ellis 1997f). Banff continued to be described in terms of endangerment in the public arena. In 1999, the Canadian Nature Federation included Banff in its list of the top 10 endangered parks for being overrun by tourism development (Cox 1999). Concern for ecological integrity continued.

The BBVS did lead to some serious consideration of “ecological integrity” in Canada. In November 1998³¹, Minister of Canadian Heritage Sheila Copps inaugurated the Panel on Ecological Integrity. Copps described the BBVS as a “wake-up call” in regard to the ecological integrity of Canadian national parks (Parks Canada 2000a:3), and she asked this independent panel to assess ecosystem conditions and “to identify issues, examine Parks Canada’s approach to ecological integrity and provide recommendations for improvement” (Parks Canada 2000a:2). Doug Hodgins, a member of the Task Force described another connection between the BBVS and the Panel on Ecological Integrity:

That’s [the Panel on Ecological Integrity] looking at some of the same sorts of issues, but on a macro scale, and I did share that retrospective review that Doug Cook and I did with the chair of the Panel on Ecological Integrity and with the director of the Secretariat, so I know that they had those thoughts when they designed their process. I hope to think that they had some influence. (Hodgins Interview 2008).

The 40-page retrospective review that Hodgins mentioned is a report completed in 2000 looking back at the trajectory of the BBVS process, providing analysis of what worked and what did not in the hopes of providing guidance for similar processes (Hodgins and Cook 2000). The panel consisted of eleven members from science and resource management, who examined the ecological integrity of Canadian national parks and provided 127 detailed recommendations. The final report made several critiques: it called for the removal of invasive species, the abandonment of business language by Parks Canada, and the removal or redesign of specific structures to improve ecological integrity (Kopas 2007: 172). Kopas (2007:176) draws a trajectory of

³¹ Another large development in national parks management occurred in 1998: Parks Canada received agency status and was allowed more flexibility in its operations. Its revenue was then able to go directly back into the parks (*Parks Canada Agency Act* 1998).

ecological integrity policy from the BBVS to the 2000 National Parks Act: “The Banff-Bow Valley Study gave rise to the Panel on Ecological Integrity, a forum for public discourse that served to restate and confirm the environmental side of the branch’s mandate. These processes, together with other management needs, ultimately led to a new act.” The resulting report was the basis for a new Canadian National Parks Act in 2000, which stressed Parks Canada’s mandate to protect “ecological integrity,” defined as: “with respect to a park, a condition that is determined to be characteristic of its natural region and likely to persist, including abiotic components and the composition and abundance of native species and biological communities, rates of change and supporting processes” (*Canada National Parks Act* 2000). The new National Parks Act put into legislation limits on commercial space and made ecological integrity the top priority of national parks in Canada (“Good news for national parks” 2000). Jeff Green reflected on the broad scale change in Canadian parks more or less coming as a result of the BBVS:

There’s still too much development in the park, but I think it has changed the mentality, the way people are approaching the park on all sides. And out of this study came the Ecological Integrity Task Force that then went across the country to talk about national parks in general. So I think it accomplished a minor paradigm shift in the way national parks are managed in Canada. (Green Interview 2008).

In official documents at least the legacy of supporting ecological integrity continued. Even the Town of Banff was affected by the concept and produced a local “State of Our Environment Report” in 2002. Like the BBVS it attempted to look at the area from a balanced point of view, assessing sustainability from the social, economic and environmental points of view (v). The report stems from the 1998 Banff Community Plan and one can trace the concern for the environment from the 1985 appointment of the Four Mountain Parks as a World Heritage Site and the identification of the threats to the montane ecosystem by the 1996 BBVS. A great

deal of the report focuses on wildlife movement and human structures and activities that intersect and disrupt these movements, including trail usage (24-27). There are three main wildlife corridors in or near the Town of Banff: Norquay-Cascade, Fenland-Indian Grounds, and the Sulphur-Golf Course. Town infrastructure such as trails, utility corridors and roads allow human access into undeveloped areas, where nonhumans previously had had relatively free reign. Recent wildlife practices were described, including the 1999 Parks Canada relocation of 200 elk from the town and the destruction of two wolves from the Fairholme pack for habituation and fearless behaviour near human populations (Town of Banff 2002: 30-32). The existence of the study itself shows an increased awareness of the role that humans have played in shaping the landscape and their impact on nonhumans, but it still relies on a definition of “ecological integrity” that essentially excludes humans in its common usage. However, it is important to note that the newest definition includes “rates of change and supporting processes,” which is more dynamic than the definition originally used by the BBVS and the 1988 National Parks Act Amendments.

The Regional Reaction: Calgary and Canmore

While local groups and governments in Banff, Canmore, and the provincial government of Alberta, were interested in being involved with and keeping tabs on the BBVS recommendations and their implementation, a study done by Dr. Brent Ritchie, the tourism expert of the BBVS Task Force, revealed that Calgarians, who accounted for 60% of park users, were mostly unaware of the study. Out of 400 random phone interviews, 62% were unaware of the BBVS. However, Calgarians overwhelmingly agreed with the BBVS that Banff was overdeveloped: 58.7% thought that the Town of Banff was overdeveloped; 24.8% thought that BNP was overdeveloped; and 87% supported limiting growth in Banff (Bachusky 1997c: 9).

This phone survey was conducted again in 2000 to track any changes in perception of the main BBVS findings and recommendations. In both parts of this study, respondents generally supported the recommendations, and there was little change in opinions supporting or opposing specific recommendations from 1996 to 2000. “As one stands back and assesses the overall picture provided, it is clear that the population studied generally supported the idea of maintaining and enhancing the environmental integrity of the Banff Region, as well as a number of specific approaches to achieving this goal. At the same time, respondents in this study want to maintain human access and visitation to the region. In order to do so, they are willing to accept a range of initiatives to better manage this visitation” (Ritchie et al 2002).

Similar thinking has not just spread from BNP and the BBVS to other national parks and studies, but it has also lent itself to developing consideration of ecological integrity and wildlife movement at a regional scale by taking communities like Canmore into consideration. Canmore is the closest town to BNP, just 6 km down the TCH, and as a result has absorbed much of the growth that might otherwise occur in Banff if there were no restrictions on the type of commercial development that could go on there, creating a flow of people and capital along the TCH from Canmore to Banff. Canmore is important in terms of wildlife movement because it is, like the Town of Banff, situated at a narrow spot in the Bow Valley, where human infrastructure has an amplified impact on wildlife habitat and movements (BCEAG 1998). Jeff Green, one of the members of the Task Force, was involved in efforts in the Canmore area and with the Bow Corridor Ecosystem Advisory Group, which was looking at how to lay out protective wildlife corridors. The Albertan government co-funded it along with Canmore. This effort is essentially a system of land use management, which seeks to incorporate the needs of the nonhuman.

Of course, not everything works out for the community, developers and wildlife. Jeff Green (2008) described a development underway near the town of Canmore, which is not compliant with its plans for wildlife corridors and may actually block one of the movement corridors in Lynn Valley:

They [the province of Alberta] put a fence along the highway with a tiny underpass that I don't think any wildlife species is going to use, and even if they did cross the road they are going to run into a condo on the other side. [...] You're going to be running into a bear or a wolf or a lynx or a cougar...they're going to be so close to development on the other side that you sort of wonder if they're going to come back again. (Green Interview 2008)

The reaction of the region around BNP was largely positive and with that came a desire to cooperate with the vision of the BBVS for the Bow Valley. However, development pressures in the park have had a tendency to spill out and spread down the TCH to Canmore and other nearby communities, which are unfettered by Parks Canada management and regulations.

The International Reaction

The international reaction to the BBVS was almost entirely positive and supportive. Bob Page, chairman of the Task Force, attributed some of the success of the implementation of BBVS recommendations to publicity generated by IUCN initially with the supposed threat to BNP's World Heritage status and then approval of the BBVS after it was completed. An IUCN World Conservation Congress meeting held in Montreal October 1996 applauded the effort ("Saving Canada's Wilderness" 1996: 51). David Runnalls, Canada's IUCN representative commented: "Two years ago, the IUCN, which monitors world heritage sites, wrote the federal government

and said that unless something was done about development in Banff, it might be taken off the list. I can't believe that it was a coincidence that the federal government commissioned a study shortly after, or that the report came out the week before an international environmental conference is about to start in Montreal" (qtd. in Grange 1996). Page expressed surprise and pleasure at the international response to the study. Soon after it was completed he received notes and letters from representatives of around 35 to 40 countries. Colleagues in the United States were also impressed by the BBVS. Page believed that international attention prompted Ottawa to take the study more seriously and attempt to implement more of the recommendations as a result (Page Interview 2008).

Conclusions: Focus on "Ecological Integrity"

Without a doubt, the response of Parks Canada and the federal government to the BBVS, represents a renewed effort and interest in the concept of ecological integrity over commerce. The BBVS (1996) and the following BNP Management Plan (Parks Canada 1997b) as well as the reports of the Panel on Ecological Integrity clearly demonstrate this (Parks Canada 2000a,b). Local communities such as the Town of Banff and Canmore began to focus on ecological integrity as well: rhetoric and tension has "largely dissipated and residents have come to accept limits to growth and have embraced higher environmental standards for Banff as a park town" (Hart 2005:14). The political opinion has shifted to more environmentally-minded sentiments overall. The next chapter examines the concept of ecological integrity and related issues from the BBVS in more detail, particularly the potential effects that these political issues have on wildlife management and movement in the landscape of the Banff-Bow Valley, which are complicated by settlements, the national transportation corridor that cuts through the park and by other major development

**Chapter 5: Conclusion—Beyond Banff: The Concept of “Ecological Integrity”
and Wildlife Movement Corridors**



Figure 5.1: Rocky Mountain sheep feed in the foreground with a view of intersecting highways and coniferous forest in the background. (Photo by author)

Nearby the Town of Banff atop a mountain some friends and I parked our rental car at the side of the road to lunch and watch a herd of Rocky Mountain sheep below. We breathed in the fresh air and held on to our napkins and lunches to keep them from being blown away. Catching glimpses of Columbia ground squirrels scurrying across the field in front of us and diving into their holes, we tried to take photographs, not knowing at the time that they were ubiquitous in the area. Behind the herd of sheep, a highway cut through the coniferous forest. Further beyond and

below in the valley, the Town of Banff spread out to the south of the Bow River, and all around were snow-capped mountains. This scene perfectly illustrates the issue at hand with wildlife in Banff National Park (BNP). This is Banff where wildlife and humans come together in close proximity, highways cut through the landscape and wildlife continues to live. The lines of wildlife, roads, and settlement intersect. This final chapter will turn to a discussion of the impacts on wildlife since the BBVS process with particular attention to the problem of boundaries and movement. We will also consider the extent to which nonhuman movement has been constrained by structures such as highways, railways, settlement and other major developments, as well as by dominant conceptualizations of nature. Then I conclude by fitting the example of wildlife movement in Banff into the nonhuman literature on movement including David Hulka's "ethics of movement," Donna Haraway's companion species theory, Henry Buller's discussion of biosecurity and biodiversity, Sarah Whatmore's work on wildlife, and William Adams' critique of a static, equilibrial nature.

Why look back at the BBVS now? In an interview, Jeff Green, a member of the BBVS Task Force, mentioned that other members had wanted to conduct a ten-year reunion to examine the progress in the Banff-Bow Valley since the study was completed in 1996. But the ten-year mark has come and gone, and the Task Force members have gone on to other projects (Jeff Green Interview 2008). Why is the BBVS important to us today? In 1994, many believed that the Banff-Bow Valley was at a crossroads, and the study shaped the future of Banff. The main finding that ecological integrity was at risk in the park was disseminated throughout Parks Canada policy and management not only in Banff but throughout Canada as well. The impacts on wildlife and fire have been especially noteworthy, leading to changes in the landscape to make some accommodation for nonhuman movement. The BBVS attempted to deal with the

conflict between environmental and development interests in the park. However, when the final report and recommendations were released in 1996, they provoked controversy and may have redirected some of the hostility over specific issues back at the Task Force itself. Hard feelings about the BBVS linger still. At the 2003 Sustainable Mountain Communities Conference held in Banff, participants discussed the study in retrospect. According to Banff resident and photographer Douglas Leighton: “It [the BBVS] was the worst thing to happen in Banff’s history...It has led to a false crisis mentality...If you like the Bush administration’s case for weapons of mass destruction, then you’ll love the case for the Banff-Bow Valley Study” (qtd. in Hart 2005:14). While this analogy is difficult to credit, Leighton’s choice of words reveals the degree to which some people still feel hostile towards the study. Others have acknowledged more positive results. Mike McIvor, an active member of the Alberta Wilderness Association who participated in the Round Table process, was pleased with the recommendations concerning wildlife and fire restoration, but less so by other recommendations, which he has argued “resulted in a backlash by those driven by self-interest.” More problematically, he has argued that Parks Canada has picked and chosen which recommendations to implement rather than completing a comprehensive review of their own management practices (qtd. in Hart 2007:14). The lingering negative reaction of some interest groups makes sense within the context of the Banff-Bow Valley’s history and this study. When specific recommendations were released, which could impact their interests or activities, groups reacted with hostility.

Bob Page, the chairman of the BBVS, notes that since the release of the 1996 BBVS, development pressures on BNP have increased, including the continued twinning of the TCH with Phase IIIB, spilling of grain from railways cars, the increased population of Calgary and subsequent use of Banff as a recreational destination (Page Interview 2008). In 1997 the average

traffic volume on the TCH was 14,000 vehicles per day and 35,000 per day in the summer months (Clevenger et al 2002b:16). Management practices attempt to mitigate these issues but often fail to fully address pressures where human activities have been firmly and seemingly irrevocably placed. Lulka (2004) argues that wildlife management procedures come into being when aesthetic or economic interests are threatened by the reduction of wildlife. The recent reduction of wildlife in BNP threatens both aesthetic ideals of wilderness and economic interests related to tourism. Images of grizzly bears, black bears, elk, and other large charismatic megafauna³² cover brochures in almost equal measure with the mountains and lakes of the park. Despite the need to maintain the scenery and wildlife of the park for economic purposes, there is also the constant drive and pressure to develop commercially to exploit wildlife and scenery for tourism.

Finding the right balance between development and conservation is important, but controversial. To understand how different interests construct ideas of conservation and balance, it is important to ask: Who decides what the correct balance is? What information do they use to support their conclusions? Who benefits from the “right” way of doing things? Currently, park officials determine management practices based on historical practices, conclusions drawn from scientific studies, a perceived need to guard and regulate wildlife populations, an ecological sensibility, and public and political opinion. Specific management methods are used to attempt to loosen the knots of messy human-nonhuman relations and include processes of surveillance, quantification, and hands-on management.

³² Jamie Lorimer (2007:915) explains: “Nonhuman charisma can best be defined as the distinguishing properties of a non-human entity or process that determine its perception by humans and its subsequent evaluation.” Conservation efforts often employ charismatic megafauna to garner support from the public and to represent wilderness.

The “Meat-maker”

Perhaps the most potent representation of the conflict of wildlife movement and human movement and development is the Trans Canada Highway (TCH) and the mitigations that have been made by humans to attempt to account for wildlife movement. While roads may appear to impact a relatively small area of habitat, they have wide-ranging effects: “Linear features such as roads can have immense and pervasive impacts on wildlife populations” (Chruszcz 2003:1378). Roads fragment important wildlife habitats, are a cause of wildlife mortality, and allow for more frequent and invasive human presence in areas where sensitive wildlife might once have had refuge. However, the disturbance caused by the TCH was quite conspicuous. The highway was nicknamed the “meat-maker” because of the high number of road-killed wildlife resulting from collisions with vehicles (Forman et al 2003:357). Other important highways (two-lane) in and around BNP include 93, 40 and IA (Clevenger et al 2001a:1341). Highways are still manageable features which wildlife can traverse in flatter areas, but in the Canadian Rocky Mountains the terrain creates additional difficulties. In some sections of the valley, only a few corridors provide plausible passage for wildlife across the highway. “Wildlife in the Rocky Mountains,” notes Jeff Green, “only have so many options to move and there is no grand plan” (Interview 2008). The Banff-Bow Valley is located within the front range of the Rocky Mountains. This landscape influences the distribution and movement of wildlife:

The parallel north-northwest–south-southeast oriented limestone ridges and shale valleys create a landscape much more conducive to north–south than east–west movement. The few large valleys, the Bow Valley being the most prominent, that dissect the Front and Central ranges are recognized as critical, not only in maintaining regional-scale east–west movements of animals but also in providing a vital link between the valleys nested

among the Front ranges of the park. For the same reasons, the Bow Valley is also one of the most important transportation corridors in the region. (Chruszcz 2003:1380)

Banff and Yoho are the only national parks in North America that have a major transportation corridor cutting through them (Clevenger and McGuire 2001). This situation has created a relatively unique intersection (at least in North America) of management, mitigation and research that has advanced knowledge about wildlife crossings and behaviours.

TCH Mitigations

The conflict between wildlife and roads in BNP has made the park one of the most studied sites for this problem in North America. Between 1980 and 1998, two overpasses and 22 underpasses were built. These structures have been the subject of on-going investigation. From 1996 to 2002 Anthony Clevenger of Parks Canada and other scientists studied the impacts of roads and the effectiveness of mitigations (i.e. fencing, wildlife overpasses and underpasses) on wildlife movements.



Figure 2.2: One of two wildlife overpasses in Banff National Park. (Photo by author)



Figure 5.3: A wildlife underpass in the Cascade Corridor. This type of structure is preferred by cougars and wolves. (Photo by author)



Figure 5.4: Elk feed behind the TCH fencing and in front of the CPR line. (Photo by author)

Engineers and scientists carefully considered how they could best prevent wildlife-vehicle collisions, which were harmful for both humans and nonhumans involved. Engineers placed structures where there was the highest occurrence of road-kill and collisions with wildlife on the TCH. Within 200 metres of each overpass there are underpasses so that species can choose between structures. Grizzly bears, wolves and all of the ungulates (i.e. deer, elk, moose, bighorn sheep) tend to use the overpasses, while cougars prefer the underpasses. Black bears use either structure. The fencing on both sides of the TCH was built from 1981 to 1999. As a result, automobile collisions with wildlife tended to cluster around the ends of the fence and near drainages (Clevenger 2003:16-18). On all three phases of the TCH within BNP, a reduction in wildlife-vehicle collisions declined when fencing was built, despite increases in traffic density. From 1981 to 1999, the overall reduction in collisions has been 80% (Clevenger et al 2001b:649,651). Many studies ignore smaller animals, and depending on the species, they may have different requirements than larger animals for mitigations to aid their movement across highways. Generally, ecologists count on indicator species to stand in for a whole suite of animals or even an ecosystem to assess quickly the ecological health of an area. Ecologists choose indicator species based on their role on the top of the food chain or because they are particularly sensitive to changes. However, this is an imperfect measure, and some species almost certainly fall through the cracks. Somewhat inadvertently, wildlife management favours large, charismatic mammals over smaller animals. However, TCH mitigations alone do not control movement across the highway, and wildlife utilize the structures in the landscape in unintended ways. Sometimes drainage culverts, which are not specifically designed for wildlife mitigation, are utilized by smaller animals such as martens and weasels to cross the TCH (Clevenger et al 2001a). Some scientists may argue that it is more important for larger animals to cross the highway because of their larger home ranges. While this may be true, smaller

animals may need to cross the road for some of the same reasons that motivate larger animals: better habitat and to mate. Clevenger et al (2002:25) recommend the construction of below road passages at frequent intervals with vegetation coverage to encourage use. In some cases data on animal movement obtained by radio monitoring or surveys were used, but more recently GIS has been used to identify sites for placement (Clevenger et al 2002a).

Wildlife Monitoring

While the placement of crossing structures and other changes to the TCH have been made with the safety and movement of wildlife in mind, it is still important to ask: are these crossing structures really working? To answer this question biologists have been closely observing the use of the crossing structures and wildlife behaviour. Long-term monitoring began in 1996 and included the use of infra-red operated cameras to capture the movements of wildlife using the crossing structures. Raked sections of dirt were placed at the entrances of structures, and scientists identified wildlife by the footprints left behind (Clevenger and McGuire 2001). Eleven species of large mammals have been monitored using the crossing structures in BNP, including grizzly bears, wolves, cougars, elk, bighorn sheep, black bears, coyotes, moose, deer, and most recently wolverines and lynx. BNP is unique with its range of different types of crossing structures within one area and its accompanying year-round monitoring program. Just as the crossing structures privilege large mammals, so does the monitoring system. Small animals may slip by the infra-red camera without being detected, passing underneath the wire intended to catch hair for DNA analysis to identify both the species and individual signature of the animal, or they may not leave identifiable marks in the sandpit meant to record tracks. The system of mitigations will continue to grow with the twinning of the TCH from Castle Junction to the British Columbia border, which will include 18 crossing structures (Ellis 2007). As of

2001 four years of monitoring had been completed and there were 30 passes by grizzly bears, 502 black bear passes, 841 wolf passes, and 587 cougar passes on all of the crossing structures in BNP (Clevenger and McGuire 2001).

BNP wildlife crossings may allow passage, but some argue that they create traps, exploited by predators. That means that predators have learned that prey are funnelled through these tight passages and that waiting at the entrances could provide an easy meal. If true, this hypothesis raises questions about the wisdom and effectiveness of the crossing structures. Since these structures are expensive to build³³, the prey-trap idea could be a reason not to build the crossing structures in the first place since predator feeding would negatively impact the effectiveness of the structures. However, Little et al (2002) reviewed the literature and found little evidence for this theory and suggested that any exploitation of the crossings was infrequent: “It appears therefore that predators can and will take advantage of artificial structures to increase their foraging opportunities. However, this is not evidence that wildlife passages themselves facilitate prey capture. [...] Predators will use passages for movement and incorporate them into their territories” (Little et al 2002:137). In Banff, this does not seem to be the issue. Rather, predators tend to avoid using the passages because of human presence (Little et al 2002:141).

One of the many interesting developments resulting from the conflict between wildlife movements and transportation corridors in BNP and in other protected areas is the development of the relatively new field of road ecology.³⁴ “In essence, road ecology uses the science of ecology and landscape ecology to explore, understand, and address the interactions of roads and

³³ Overpasses cost approximately US\$1.15 million each. Underpasses, depending on the design range from US\$120,000 to 670,000 (Forman et al 2003:164).

³⁴ For a solid introduction to road ecology, consult: Forman, Richard T.T. et al. *Road Ecology: Science and Solutions*. Washington, D.C.: Island Press, 2003.

vehicles with their surrounding environment” (Forman et al 2003:xiv). This sort of integrated approach to the effects of roads like the TCH on wildlife populations appears promising. While engineering and science cannot mitigate all of the wildlife mortalities that occur and the fragmentation of habitat, perhaps the new discipline of road ecology can act as a compromise between transportation systems and the landscape-scale needs of larger species. “Today, few new roads are being built in parks. But the looming problem ahead is how to handle the motorized masses of people entering parkland and still provide a quality experience for the visitor and meet essential ecological quality goals. The road network itself is key to accomplishing this. Improvements in the network, such as mitigation measures, public transit, and road closures, should provide the answer to that dilemma” (Forman et al 2003:360). There is no question now of removing the TCH from the park; the east-west Canadian transportation corridor is too vital. It is a matter of finding a way to best live with the current landscape, and the best solution so far for humans and nonhumans is to create the possibility for safe crossings across the highway. It is a difficult task to create mitigations for the TCH and CPR that benefit all species of wildlife that may need to cross and that are economically feasible, and it is perhaps impossible to accommodate all species.

Wildlife Corridors as a Solution

The broader concept of ecological integrity points to the need for restoration of ecosystems where they have been impaired. One way of at least maintaining populations of large, wide-ranging wildlife might be wildlife corridors, which provide connectivity between patches of habitat where human-dominated landscapes exist. It is important to note that wildlife corridors are planned at a variety of scales from large regional corridors to small local corridors

(Duke et al 2001:261-262). Jeff Green (Interview 2008) describes efforts to create wildlife corridors around the Town of Banff:

I applaud the government of Canada for getting rid of all of the things on the north side of the highway. They [removals of structures] had tremendous social consequences. The cadets were furious. They lost historical property. There's the people in the airport. They were very angry. The people that owned horses. They were very angry, but the government stuck it through. The wardens are much happier about what wildlife is doing in terms of the town.³⁵



Figure 5.5: A display at a nearby rest stop explains the purpose of the wildlife overpasses to the interested public. Turning the wheel provides an audio explanation of the wildlife crossing mitigations (Photo by author)

³⁵ Green describes here the removal of structures (the cadet camp, airstrip, buffalo paddock, corrals and barns) north of the TCH by Parks Canada to clear the area to for a less congested wildlife movement corridor immediately after the release of the BBVS Task Force's final report. See Chapter 4 for a more detailed discussion of recommendation implementation

There are three wildlife corridors that have been planned within BNP, the most promising so far for actual usage by wildlife has been the Cascade Corridor, which is 1 km north of the Town of Banff. The TCH acts as the southern border, and Cascade Mountain is the northern border of the corridor (Duke et al 2001:263-264). Near one wildlife underpass in the corridor there is a large sign with the silhouette of a cougar that reads: “Cascade Wildlife Corridor. Wolves and cougars use this critical wildlife corridor to move safely through the Bow Valley. The presence of people (and their dogs) can prevent wildlife from using this important corridor. Please choose an alternate area such as to explore or walk your dog.” This is the area that the BBVS recommended the removal of many structures such as the buffalo paddock and cadet camp in hopes of restoring this area to nonhuman use. Public education, including this sign and other interpretive materials (see Figures 5.5 & 5.7), on the topic of the wildlife movement and crossings is vital to the maintenance of the corridors. Human presence, however innocuous it may appear including hiking and biking near the structures, have a significant effect on whether an animal may choose to use the structure or not.

There has also long been an understanding that Banff National Park is not the correct scale to think about many species of animals, especially grizzly bears and other large carnivores or migratory animals that have extremely large ranges. In the 1992 International Convention on Biological Diversity, Article 8(e), Canada and its provinces have a responsibility to “promote environmentally sound and sustainable development in areas adjacent to protected areas with a view to furthering protection of these areas” (qtd. in Attridge 1998:232). However, how can such a broad statement be implemented? For some, the solution to this problem of scale is to imagine animal movement on a very large scale—along the grain of the continent. In the case of western North America, the Yellowstone to Yukon (Y2Y) Conservation Initiative has provided

the vision of a wildlife corridor from the Greater Yellowstone Ecosystem in the United States to the Yukon in northern Canada. Y2Y has championed grizzly bears, wolves, and other carnivores as key species to use as indicators of ecosystem health. One of the biggest threats to the integrity of national parks such advocates argue, is the administrative borders and what is happening outside of those borders (Knight and Landres 1998:1). Richard Forman (1995:xviii) notes:

It is simply inept or poor-quality work to consider a patch as isolated from its surroundings in the mosaic. Designs, plans, management proposals, and policies based on drawing an absolute boundary around a piece of the mosaic should be discarded. Moreover, because we know it is wrong, i.e., we know ecological context is as important as content, the practice is unethical. Ethics impel us to consider an area in its broadest spatial and temporal perspectives.



Figure 5.6: A Parks Canada sign and fencing prohibits people from entering a wildlife corridor near one of the wildlife overpasses. (Photo by author)

Bob Page (Interview 2008), the chairman of BBVS commented on the role of connectivity in the relationship between the Banff-Bow Valley and areas beyond it:

That the issues of connectivity can be so important in connection and that's why Y2Y is so important as an adjunct to what we're trying to do here in the Banff-Bow Valley Study, and we went and had a number of researchers in Yellowstone up. The linkages between the research for affinity in the United States and for the Banff-Bow Valley are very close on things like wolves for instance. Connectivity in the landscape is a lifeline for nonhuman animals.

For BNP the protection of provincial lands including adjacent Kananaskis Country would be the logical next step. Y2Y's director of conservation Wendy Francis (Interview 2008) echoed some of the same landscape scale concerns found in ecological research:

We want to get a better sense of how that whole landscape functions from an ecological perspective, so if you think about the four national parks, they are surrounded by provincial land. That conflicts with the biggest protected chunk of land anywhere in Y2Y, so it serves as a really valuable core protected area. And so our overall goal is to make sure that it gets managed in a way that supports a healthy population of grizzly bears in particular, which would be probably somewhere between 700 and a 1,000 bears, and so we need to understand where the core habitat for grizzlies is, whether there is any management threat that needs to be addressed like the roads and the railroad in the park or hunting on provincial land, that sort of thing.

The location of core habitats could fluctuate and change greatly depending on the movements and behaviours of nonhuman animals, climate change, human presence, and so on. The

designation of a large-scale wildlife corridor is a good step to protect wildlife, but what happens when wildlife break the rules? What happens when they cross that imaginary line between wild space and human space? Is the only way to control wildlife movement to stop it dead in its tracks?

All of these questions turn, ultimately, on where the line is drawn between the wild, or nature, and culture. Whatmore and Thorne (1998:435-436) state that the “framing of the wild renders creatures that live ‘there’ inanimate figures in unpeopled landscapes, removing humans to the ‘here’ of a society from which all trace of animality has been expunged.” The way in which we think about the wild and nature influences how we think about its residents, and this creates a false perception of the landscape, which has real impacts. Some geographers suggest that we should think about nonhuman animals as dynamic beings with agency, moving where they will. David Hulka (2004:440) is concerned with static representations of nonhumans, which “in turn, facilitate the compartmentalization of nonhumans and the construction of hierarchies.” Hulka (2004) argues, rather, for an “ethics of movement,” drawing from Deleuzian theory³⁶, which would allow for the dynamic, indeterminate, baroque movements of nonhuman bodies. “They [the bison] are bodies that are unclear about their capabilities and limitations, yet nevertheless are continually weaving into and out of the gaps and bridges that make up the local terrain, folding in baroque movements of expression...” (Hulka 2004:452). Sarah Whatmore comes to a similar conclusion and states that we need “to explore the limits of these precarious geographies of wildlife, deterritorializing the creatures and spaces encapsulated by the wild to entertain more promiscuous patterns of worldly inhabitation that recognize its cargo of uncanny, but much less distant, kinds” (2002:9). However, unlike Hulka, Whatmore fails to infuse the

³⁶ Hulka (2004) draws much of this theory from Deleuze’s concept of the baroque. See specifically: *The Fold: Leibniz and the Baroque*. Translated by Tom Conley. University of Minnesota Press: Minneapolis, 1993.

lively agency of nonhumans into her descriptions, and it is this lack of liveliness that she criticizes in other works dealing with nonhumans.

Faced with conflicts of interest, both present and historical, policy and decision-makers have chosen not to “deterritorialize” but to redraw the lines of wildlife territories and human territories, which denies the “promiscuous patterns of movement” of nonhumans and essentially draws a line between human spaces and nonhuman spaces, wilderness and civilization, wildlife and tame life, reinscribing hierarchies. While the drawing of borders and the creation of parks and reserves do allow wildlife spaces to persist for the time being, it is a stop-gap measure to maintain the status quo. BNP is an excellent habitat for wildlife, but wolves and bears do not necessarily stay within its borders and often do not. Parks Canada may designate wildlife corridors in the park and post signs informing humans to stay out (see Figure 5.6 & 5.7), but officials cannot tell nonhumans to stay inside these corridors. To make some of these claims about wildlife more concrete, we will briefly examine the role that one vital species has played in this narrative of wildlife movement and human development and management.

The Grizzly Bear in Banff National Park

The grizzly bear is perhaps one of the most influential nonhuman animals in BNP, if not for the presence of specific individuals of the species and encounters with them, then at least as indicators of ecological health in the park. Grizzly bears are a key species because they are at the top of the food chain, have large home ranges and are particularly sensitive to the presence of humans (Gibeau et al 2002). Although the use of indicator species is an imperfect measure, it acts as a coarse filter to gauge the state of the ecosystem. In the case of the Banff-Bow Valley, when grizzly bear habitat is protected, 98% of the species in the area are also protected (Gibeau et al 1996:1). There has been a long history between humans and grizzly bears in BNP, which

parallels a similar history in Yellowstone National Park. Both national parks allowed grizzly bears to feed at dumps, which became popular viewing sites for tourists. Beginning in 1968 in BNP and 1970 in Yellowstone, the dumps were closed, which led to the killing of bears that continued to look for food sources among humans (Leighton 2001:11). Wildlife scientists refer to this behaviour of lack of fear around human presence as habituation. Bears that no longer fear humans are dangerous and are a risk and threat to human lives and the lives of domesticated animals. This situation came to a head in the summer of 1980 when three people were badly injured and in one case killed in a series of bear maulings. Strict measures concerning garbage disposal and trail closures where bears were sighted alleviated the problem of bear attacks near the Town of Banff (Marty 2008). Gibeau et al (2002:233) studied how four different types of human developments, including the TCH, other paved roads, high-use trails and other features such as campgrounds, lodges and picnic areas, affected grizzly bear movements. Male bears avoided the TCH, and females even more so. Bears more comfortable near human-use areas had a tendency to be habituated and were more likely to end up dying at the hands of humans (Gibeau et al 2002:234). Bear researcher Stephen Herrero (Interview 2008) discusses some of the movement-related issues that grizzly bears face in BNP:

It [the grizzly bear population in BNP] seems to be poised around a balance point. And yet we know that regionally as soon as you get outside of the park that there's some management challenges that aren't as easily addressed as they are inside the park, but we have the information and we know the primary causes of mortality inside the park right now. They're focused on railway mortalities, highway mortalities, and management removals, just another sort of big, garbage-can category of poaching and other illegal kills, legal hunting and kills, etc. So we have a layout of those, and Parks Canada and the

Alberta Sustainable Resource Development are working on trying to manage those causes of mortality. But there's so much human activity in the landscape that it's a very difficult task.

Management of bears is less about controlling the grizzlies and more about countering human attitudes, behaviours and developments. "Despite biological knowledge of grizzly bears in the Banff-Bow Valley, bear management policies remain controversial because of long-standing negative attitudes toward predators and the risk of injury or death as a result of encountering a grizzly bear. Policy-makers in the region have struggled to find an appropriate balance between bear conservation and demands for commercial development and recreational use" (Chamberlain 2003:2). When economic or special interests come into the picture, conservation of wildlife becomes a messy issue. Herrero (Interview 2008) discusses the issue of grain spillage on the railroad in more detail:

Main challenges are trying to influence the activities of a national entity such as the Canadian Pacific Railway. That their business is delivering freights at an economic rate and the fate of wildlife on the track is something that they are concerned about because it has a public profile. They get clobbered over it, but they're not immediately spurred on by the pressure. They're trying to clean up spilt grain, and Parks Canada is trying to monitor that spilt grain to see if they're really doing it. And so there's some hope that there'll be progress there. And...in theory they're concerned about other contexts in which freight trains hit and kill species like grizzly bears but it continues to be a serious problem. So it's a dynamic tension that is a long-term management challenge, and hopefully by monitoring we'll continue to get the data that will help define what success is and if it's happening.

Beginning in 2006, Parks Canada initiated an integrated problem-solving (IPS) group to deal with issues related to grizzly bear management. A grizzly bear dialogue group was meant to integrate values, perceptions and beliefs with scientific information in decision-making. Some of the issues the IPS group has been discussing include determining a grizzly bear mortality target, a management approach specifically for the Allenby pass area, and determining targets related to habitat (Parks Canada 2006 Annual Planning Forum). Herrero (Interview 2008) discusses the value of dialogue in management processes:

Well, it [the IPS process] is just a logical extension of the evolution and development of trying to develop more respectful and meaningful means of communication between stakeholders and between the array of stakeholders that have an influence on the future of species like grizzly bears and the regional landscapes. And I think it's a very encouraging evolution. But whether or not it will have anything to contribute beyond dialogue will really become clear over the next couple of years because we're finally getting to the point of trying to grapple very specifically with issues and come up with decisions and recommendations that Parks Canada, we think, is going to implement, but we don't know, so it's an interesting time.

Parks Canada has been careful in crafting policy for the preservation of wildlife and habitat in Banff National Park, but history attests that implementation is not always carried out completely. One definite exception has been the agency's commitment to the mitigation of the TCH.



Figure 5.7: Signs on top of Sulphur Mountain educate visitors on how to live with Rocky Mountain sheep. (Photo by author)

Science, Society and Decision-making in BNP

Although much of the discussion surrounding issues in BNP has been about ecological integrity and the health of wildlife populations; human attitudes, personalities, politics and development determine decision-making and policy. BBVS was relatively ground-breaking with the level of public participation incorporated into the study. The Round Table process was novel in the Banff-Bow Valley and allowed for a consideration of different perspectives and values. A collaborative, values-integrative approach calmed some of the conflicts that had been brewing between interest groups for decades. Parks Canada had grown increasingly reliant on the use of science and principles of ecology to mould their policies and management, and this emphasis on scientific principles was reflected in the BBVS process and final report. Much of the discussion focused on ecological integrity in the Bow Valley and to what extent it may have been impaired by human use. “What was important,” Green reflects, “was I think we found ways to get people

to start to trust some of the science that was going on. And we tried to use the science” (Green Interview 2008). This belief in science to help solve ecological and management problems was a definite shift in the history of the park. In the 1880s and for the first half of the 20th century recreation and human use were the main concerns of BNP managers although there was concern for wildlife in a utilitarian sense. However, ecology as a system of understanding nonhuman nature began to emerge in the 1920s but did not have real pull in the parks until much later on. Dave Poulton, a president of Canadian Parks and Wilderness Society (CPAWS) noted: “Through the 1970s and 1980s, there definitely seemed to be more of a focus on recreation in the parks. But the Banff-Bow Valley Study provided a catalyst that has led to some very positive changes in how the national parks are now managed” (qtd. in Jackson 2007).

Local communities like Banff and Canmore have taken up ecological integrity and other sustainability-related sensibilities. The Town of Banff prepared a “State of Our Environment Report” in 2002, which highlighted Banff’s delicate position as a community within a national park and as an impediment to wildlife movement (Highwood Environmental Management Ltd. 2002). Canmore is a town of approximately 13,000 people near the entrance of BNP. In the 1990s, two wildlife corridors were established within the town as residential development and golf courses put pressure on wildlife movements. The corridors were 300 metres wide and were meant to let wildlife travel north-south through the Bow Valley. However, an incident in 2005 caused residents to think more critically about their relationships with wildlife. On June 4, a local jogger was killed by a bear on an approved trail. This incident prompted Canmore residents to ask themselves: “Are we living too close to the bears? Are they living too close to us?” (“We need reason” 2005; Hilty et al 2006:151). The creation of wildlife corridors and other boundaries are meant to protect wild spaces and wildlife, and management of human use does

make a difference. However, it is more difficult to control the movements and desires of nonhuman agents. Grizzly bears will not read the maps or signs telling them where they belong. Some opponents to preservation or the creation of wildlife corridors might use this as an argument against implementation. However, the residents of Canmore do not even consider that the bears should be moved. Rather, they wonder how they can change to better live with bears. In the case of large, predatory mammals, it seems that the best way to “live with” them is to live away from them, to give them space.

Donna Haraway’s latest project has been the development of her companion species theory to explore the relationship between humans and nonhumans and ways to live with each other. “Living with animals, inhabiting their/our stories, trying to tell the truth about relationship, co-habiting an active history: that is the work of companion species, for whom ‘the relation’ is the smallest possible unit of analysis” (Haraway 2003:20). Haraway explores the human-dog relationship because that is perhaps the closest nonhuman companion in many people’s lives and certainly in her own experience. However, her thinking can be applied to relationships with other nonhumans. Her companion species theory is not simply about “companion animals,” the term she uses to describe domesticated animals like horses, dogs, and cats, which humans have historically encouraged and cultivated to act as workers and companions. Not all relationships between humans and significant others are equal. Therefore, the relationships between human dog and human and grizzly bear are not the same relationship, but some basic rules apply. “It is a question of cosmopolitics, of learning to be ‘polite’ in responsible relation to always asymmetrical living and dying, and nurturing and killing” (Haraway 2007:42). Human relationships with wildlife require learning about them and determining how best to live with them, which in some cases may simply mean giving some wildlife species some space to live

apart from humans. “It is the art of naturecultures. The relation is the smallest unit of analysis, and the relation is about significant otherness at every scale. That is the ethic, or perhaps better, mode of attention, with which we must approach the long cohabiting of people and dogs” (Haraway 2003:24). Haraway (2003:62) asks us to “remember how to live like that at every scale, with all partners” (Haraway 2003:62). The companion species theory highlights the need for human and nonhuman to respect and respond to each other, which is a necessity in any relationship. There, of course, is a difference in the type of response humans should give to wild animals as opposed to domesticated animals, which often rely on humans for food and protection. But how do you live with and respond to an animal that could potentially kill you?

The response humans should give wildlife is attention to needs, mainly making certain that wildlife has space and good quality habitat on which to live. This appears a fairly straightforward answer, but implementing this becomes extremely difficult and complicated by human politics.

The difficulty of coexisting with large carnivores is less about the carnivores than it is about us and our views. The basic problem is how we go about interacting with one another over troubling public issues and collectively deciding how we want to live. We can manage ourselves in cooperative ways that will give large carnivores more room than they presently have. (Clark et al 2005: 4)

This is something that the scientists studying wildlife and transportation in BNP realize full well. The politics of decision-making, policy creation and implementation in management practices has always been a struggle. Human values and desires fluctuate based on the historical context, the influence and power of particular agencies and interest groups and other factors. The difference now as opposed to the past is that ecological knowledge and thinking is generally

acknowledged as a relevant epistemology for understanding Banff and for its management. Scientists describe their understanding of wildlife not simply in terms of an arithmetical approach to populations but also the movement and dynamism of nonhuman animals as they navigate a landscape with obstacles that have been placed there by humans within a relatively recent time-span and natural features that have been developing for thousands and thousands of years.

One of the most important lessons we have learned from our research is that we are dealing with a landscape that has permanent structures, but dynamic wildlife populations and processes going on around it. The crossing structures and fencing will remain in place for the next 50 or 100 years, maybe more. However, wildlife populations will undoubtedly vary geographically and fluctuate in number during this time. What looks like a crisis situation today for one species may have an entirely different outlook and future the next year or in 10 years. (Clevenger and McGuire 2001)

There are no final answers to the issue of wildlife and habitat preservation. Populations fluctuate. Animals habituate to human presence or don't. Climates change. Habitats worsen or improve. Flexibility is needed to let the human-nonhuman relationship work well.

Attitudes toward wildlife, especially predators, have changed, but some of the old attitudes and prejudices linger as new ecological values are introduced. Buller (2008:1587) describes the phenomena of wolf reintroduction in the French alps and the changing attitudes of people: "The wolves that are walking back into a landscape are doing so less as predators on still-present livestock but, rather, as symbolic heralds of a newly reinvigorated naturality, one in

which the competing rhetorics of biosecurity³⁷ and biodiversity curiously intertwine.” There is a seeming tension between the need to keep and encourage predators like wolves and grizzly bears in the landscape when historically, these same animals were killed to encourage game animals to prosper. Fears that predators could harm people, pets and livestock persist.

The relationship of biosecurity to biodiversity is increasingly the relationship between the tame or tamed (essential, controlled, fixed, known, and secure) and the wild (diverse, shifting, unknown, and therefore an element of risk). At one level, ‘diversity’ and ‘security’ seem almost intrinsically antagonistic. Forms of control and governance are most effectively exercised through processes of standardisation and organisation. (Buller 2008:1592).

Humans have assigned spaces where they believe it is acceptable for predators to exist (i.e. national parks and wildlife refuges) and spaces where it is not acceptable for predators to exist (human settlements, ranches, farms, etc.). However, the world does not exist as a mosaic of acceptable and unacceptable areas for wolves. Rather wild and tame spaces interact and overlap. Buller (2008:1594) describes this interaction in the French Alps:

In a sense, the wolf space is fundamentally different to that of the managed Alpine landscapes of upland husbandry systems. It is a predatory space, a space of attack and concealment. Yet, it has become contiguous with the grazing spaces of the sheep and the shepherds, a space of openness, observation, and safety, as well as with the iconic landscapes of the mountain aesthetic, a space of enjoyment and pleasure. [...] we must recognise that the wolves blur and transgress that border between not only wild spaces

³⁷ Biosecurity literally means “safe life,” whether the life is that of humans or their domesticated companion animals (pets, livestock, etc.) or both.

and domestic spaces, wild nature and familiar nature, threat and security, but also `nature' and `self', provoking fear but also wonder, crossing over and reenchanting like messengers from the external wild and redefining it as a process enacted by humans and nonhumans alike.

Predators are tied up with danger and risk, and their presence in a space or landscape changes how we think about that space. Wolves and bears are constantly moving and weaving through landscapes and so is everything else.

William Adams (2003) argues that not only wildlife are moving and dynamic but all of nature is as well and any attempts to study it will create partial knowledge that is equivalent to taking a snapshot of a moving object: “The attempt to classify the turbulent diversity of nature is based upon assumptions of equilibrium. Only if nature stays still can science get a long enough look at it to provide a usable classification. If that nature is *not* still, science has to work as if it is. Nature is therefore treated as dynamic, but tending to equilibrium—diverse, but open to simple classification that is robust enough to be useful” (Adams 2003:225). Ecology does take dynamism into consideration, but Adams argues that such an understanding of ecology as something other than a balance easily disturbed by human activity is a much more recent development of the past couple of decades:

Nature is dynamic and highly variable. Its patterns at one particular place and time are contingent upon preceding events; its trajectory through time is open ended and does not tend towards an equilibrial point. Human actions are part of the web of influences on ecological change, not external equilibrium-disturbing impacts. The implications of this is that science cannot tell conservationists what nature ‘ought’ to be like, and it may not always even be able to describe what it used to be like, and how and why it changed.

Conservationists will very often need ecology, but their science gives them no privileged insight into the way nature should be. They will have to work that out the same way everyone else does, by thinking and talking about it. (Adams 2003:228-229)

Science cannot give us moral guidance, telling us what we ought to do in regard to wildlife, wilderness and nature. This is where processes like the BBVS come into play. Everyone has their own idea about how development should progress, to what extent nonhuman nature is and should be affected. The Round Table allowed representatives to discuss, consider and compromise with other groups what they believe the Banff-Bow Valley should look like. After this process and multiple studies the Task Force came to the conclusion that the ecological integrity of Banff was at risk; wildlife populations were at risk; fire suppression needed to be stopped; settlement and development had encroached too much into wild spaces. While the Task Force and subsequent Parks Canada policy has emphasized ecological integrity over human use of BNP, national parks are meant for both purposes:

There can be no “victory” for either preservation or use: a park system demands both. Unrestrained use would make the park no different from places outside its borders, and the park as an idea would be meaningless. Likewise, unrestrained preservation would demand the exclusion of persons, a policy not only politically untenable but ecologically contrived, in that it would arbitrarily leave out one species to preserve a nature that had already been shaped by that species. Park policy demands greater latitude, so that “benefit” and “unimpaired” can continue to share space in the same sentence.

(MacEachern 2001:19)

Management within parks is fairly reflexive and is aware of the tensions between and need for both human use and preservation and conservation. Problems more often arise because of the hard lines between parks and adjacent areas.

Let's return to David Hulka's "ethics of movement" idea, which challenges the traditional system of preserving one discrete place outside of the context of the greater ecosystem or landscape:

Reconfiguring movement as ontology would force management agencies to reassess the validity of their conservation plans. Such an approach is not intended to diminish interaction through the purification of wilderness, but rather to find new modes of coexistence within the landscape. Boundaries, of diverse types, will continue to persist.

However, it seems best to make these boundaries more transparent, flexible, and (at least) as periodically ephemeral as possible in order to establish a less-hierarchical set of human-nonhuman relations. (2003: 461)

Banff National Park is at the centre of a conflict between various human uses and conservation for the purpose of maintaining wildlife populations and the health of the ecosystem and is attempting to find a good mix of the two. Park managers have to take a lot into consideration: interest groups, public use, ecological integrity, science, and funding. It is a precarious political situation in which to make decisions and manage humans and wildlife, and the only thing that is certain is that it will always be dynamic, changing, and moving.

Bibliography

- Adams, Jeff. 1993. Twinning breaks pledge says expert. *Banff Crag and Canyon*, April 16.
- Adams, William M. 2003. "When nature won't stay still: Conservation, equilibrium and control." In *Decolonizing Nature: Strategies for Conservation in a Post-colonial Era*. Edited by William M. Adams and Martin Mulligan. Earthscan Publications Ltd.: London and Sterling, VA.
- . 1994. Pressure building for valley watchdog. *Calgary Herald*, December 2.
- Alberta Wilderness Association, Bow Valley Naturalists Federation of Alberta Naturalists, and National and Provincial Parks Association. 1984. "Public Mislead by Four Mountain Parks Planning Program." News Release, October 15.
- Anderson, Kay. 1998. "Animals, Science, and Spectacle in the City." In *Animal Geographies: Place, Politics, and Identity in the Nature-Culture Borderlands*. Verso: London and New York.
- Andreef, Monica. 1994. Study supercedes Park's review plan. *Banff Crag and Canyon*, May 18: 3.
- . 1994b. No interference—study head. *Banff Crag and Canyon*. July 13.
- . 1995a. "AMPPE leaves study, claims scientific bias." *Banff Crag and Canyon*, January 4:2.
- . 1995b. Provincial participation in study urged by mayors. *Banff Crag and Canyon*. February 15.
- . 1995c. Twinning a safety decision. *Banff Crag and Canyon*, September 27.
- . 1995d. Meat put on bones of contention. *Banff Crag and Canyon*, November 22: 12.
- . 1996. Bow Valley Study Roundtable wraps up. *Banff Crag and Canyon*, April 3: 3.
- . 1996b. Bow Valley Study puts pen to paper. *Banff Crag and Canyon*, May 29: 4.
- , and Monte Stewart. 1997. Compromise softens rules for Banff park. *Calgary Herald*, January 25.
- Armstrong, Christopher, Matthew Evenden, and H.V. Nelles. 2009. *The River Returns: An Environmental History of the Bow*. McGill-Queen's University Press: Montreal & Kingston.
- Attridge, Ian. 1998. "Canadian Parks Legislation: Past, Present and Prospects." In *Changing Parks: The History, Future and Cultural Context of Parks and Heritage Landscapes*, edited by John S. Marsh and Bruce W. Hodgins. Natural Heritage/Natural History Inc.: Toronto.
- Babin, Tom. 1999. Park management blasted at forum. *The Calgary Herald*, October 16.

Bachusky, Johnnie. 1997a. Bow Valley Parkway gets reprieve. *Banff Crag and Canyon*, January 29: 1,3.

---. 1997b. Mayor called on study remarks. *Banff Crag and Canyon*. February 5: 2.

---. 1997c. Survey shows Calgary unaware of Banff-Bow Valley Study. *Banff Crag and Canyon*, February 19: 9.

---, and Cathy Ellis. 1997. Federal government may remit Bow Valley closure. *Banff Crag and Canyon*, January 29: 4.

Banff-Bow Valley Study. 1996. Banff-Bow Valley: At the Crossroads. Summary report of the Banff-Bow Valley Task Force (Robert Page, Suzanne Bayley, J. Douglas Cook, Jeffrey E. Green, and J.R. Brent Ritchie). Prep. For the Honourable Sheila Copps, Minister of Canadian Heritage, Ottawa, ON.

Banff-Bow Valley Study. 1996. Banff-Bow Valley: At the Crossroads. Technical report of the Banff-Bow Valley Task Force (Robert Page, Suzanne Bayley, J. Douglas Cook, Jeffrey E. Green, and J.R. Brent Ritchie). Prep. For the Honourable Sheila Copps, Minister of Canadian Heritage, Ottawa, ON.

Banff-Bow Valley Study. 1995. "Banff-Bow Valley Study: Background Information."

Banff-Bow Valley Study. 1995. State of the Banff-Bow Valley. Compiled by Banff Bow Valley Study Secretariat, Banff, Alberta, ESSA Technologies Ltd., Vancouver, B.C. and Praxis Inc., Calgary, Alberta for Banff-Bow Valley Task Force, Banff, Alberta.

Barnes, Trevor J., and James S. Duncan, editors. 1992. *Writing Worlds: Discourse, text and metaphor in the representation of landscape*. Routledge: London and New York.

Barnett, Vicki. 1994. Highway twinning called 'Berlin Wall.' *The Calgary Herald*, January 4.

Bayley, Suzanne. Interview by Laurie Dickmeyer. Edmonton, AB., 6 October 2008.

Beck, Ulrich. 1992. *Risk Society: Towards a New Modernity*. Translated by Mark Ritter. Sage Publications: London.

Bella, Leslie. 1987. *Parks for Profit*. Harvest House Limited: Montreal.

Binnema, Theodore (Ted), and Melanie Niemi. 2006. "'Let the Line Be Drawn Now': Wilderness, Conservation, and the Exclusion of Aboriginal People from Banff National Park in Canada." *Environmental History* 11: October, 724-750.

Bow Corridor Ecosystem Advisory Group (BCEAG). 1998. Wildlife Corridor and Habitat Patch Guidelines for the Bow Valley.

Buller, Henry. 2008. "Safe from the wolf: biosecurity, biodiversity, and competing philosophies of nature." *Environment and Planning A* 40:1583-1597.

Burke, David. 1996. Study reactions mixed. *Banff Crag and Canyon*, October 9: 3, 11.

Burnett, J. Alexander. 2003. *A Passion for Wildlife: The History of the Canadian Wildlife Service*. UBC Press: Vancouver and Toronto.

Canada. 2000. Canada National Parks Act. Department of Justice website. <http://laws.justice.gc.ca/en/showdoc/cs/N-14.01///en?page=1>. Accessed April 27, 2009.

---. 1998. Parks Canada Agency Act. http://www.pc.gc.ca/eng/docs/bib-lib/~media/docs/bib-lib/pdfs/acts/pcaa_e.ashx. Last accessed 8 July 2009.

Canadian Heritage. 1994. Parks Canada Guiding Principles and Operational Policies. Ottawa, Ontario: Supply and Services Canada.

Chamberlain, Emily Carter. 2003. "Perspectives on Grizzly Bear Management in Banff National Park and the Bow River Watershed, Alberta: A Q Methodology Study." School of Resource and Environmental Management Report No. 394. Simon Fraser University.

Chruszcz, Bryan, Anthony P. Clevenger, Kari E. Gunson, and Michael L. Gibeau. 2003. "Relationships among grizzly bears, highways, and habitat in the Banff-Bow Valley, Alberta, Canada." *Canadian Journal of Zoology* 81:1378-1391.

Clark, Tim W., Murray B. Rutherford, and Denise Casey, eds. 2005. *Coexisting with Large Carnivores: Lessons from Greater Yellowstone*. Washington: Island Press.

Clevenger, Anthony P. 2005. "Science-based approach to adaptive management of the TCH corridor: Canadian Rocky Mountain Parks." In *Proceedings of the 2005 International Conference on Ecology and Transportation*. Edited by CL Irwin, P Garrett, KP McDermott. Center for Transportation and the Environment, North Carolina State University, Raleigh, NC: 94-99.

---. 2003. "Movements, mortality and mitigation: An Overview of the Final Report on Roads and Wildlife in the Canadian Rocky Mountain Parks." *Research Links* 11(2):16-19.

---, and Terry M. McGuire. 2001. "Research and monitoring the effectiveness of Trans-Canada highway mitigation measures in Banff National Park, Alberta." 2001 Annual Conference & Exhibition of the Transportation Association of Canada. Halifax, Nova Scotia, September 16-19.

Colpitts, George. 2002. *Game in the Garden: A Human History of Wildlife in Western Canada to 1940*. UBC Press: Vancouver and Toronto.

- Clevenger, Anthony P., Jack Wierzchowski, Bryan Chruszcz, and Kari Gunson. 2002a. "GIS-Generated, Expert-Based Models for Identifying Wildlife Habitat Linkages and Planning Mitigation Passages." *Conservation Biology* 16(2):503-514.
- , Bryan Chruszcz, and Ari E. Gunson. 2002b. "Spatial patterns and factors influencing small vertebrate fauna road-kill aggregations." *Biological Conservation* 109:15-26.
- , and Terry M. McGuire. 2001. "Research and monitoring the effectiveness of Trans-Canada highway mitigation measures in Banff National Park, Alberta." 2001 Annual Conference & Exhibition of the Transportation Association of Canada. Halifax, Nova Scotia, September 16-19.
- , Bryan Chruszcz, and Kari Gunson. 2001a. "Drainage culverts as habitat linkages and factors affecting passage by mammals." *Journal of Applied Ecology* 38:1340-1349.
- , Bryan Chruszcz, and Kari Gunson. 2001b. "Highway mitigation fencing reduces wildlife-vehicle collisions." *Wildlife Society Bulletin* 29:646-653.
- "Contesting the Wilderness." 1984. *MacLean's*, December 3:65-66.
- Cornwell, Laura. 2004.
- Cook, Doug. Telephone interview by Laurie Dickmeyer. 22 October 2008.
- Coopers and Lybrand Consulting. 1995. Tourism Outlook Project. Prepared for the Banff-Bow Valley Task Force, Banff, AB.
- Cornwell, Laura. 2004. "Future Planning: Banff National Park." In *Mediated Modeling: A System Dynamics Approach to Environmental Consensus Building*. Edited by Marjan van den Belt. Island Press: Washington.
- Cox, Bob. 1999. Banff called one of top 10 endangered parks. *Calgary Herald*, December 14.
- CP Rail wants to keep tracks clear of grain, animals. 1996. *Banff Crag and Canyon*, November 6: 20.
- Cronon, William. 1995. "The Trouble with Wilderness; or, Getting Back to the Wrong Nature." In *Uncommon Ground: Toward Reinventing Nature*. Edited by William Cronon. W.W. Norton & Company: London and New York.
- Curry, Shannon, and Ed Whittingham. 2000. Leave Lake Louise alone; We'll set a terrible precedent for Canada's national parks if a huge convention centre is built at Lake Louise, say Shannon Curry and Ed Whittingham. *The Globe and Mail*, December 8: A19.
- Dearden, Philip, and Jessica Dempsey. 2004. "Protected areas in Canada: decade of change." *The Canadian Geographer* 48(2): 225-239.
- Deleuze, Gilles. 1993. *The Fold: Leibniz and the Baroque*. Translated by Tom Conley. University of Minnesota Press: Minneapolis.

- Dempster, Lisa. 1996. Banff in the 21st Century. *Calgary Herald*, September 15.
- Doomsday study unrealistic: Banff. 1996. *Banff Crag and Canyon*, November 6: 15.
- Duke, Danah L., Mark Hebblewhite, Paul C. Paquet, Carolyn Callghan, and Melanie Percy. 2001. "Restoring a Large-Carnivore Corridor in Banff National Park." In *Large Mammal Restoration: Ecological and Sociological Challenges in the 21st Century*. Edited by David S. Maehr, Reed F. Noss, and Jeffery L. Larkin. Island Press: Washington.
- Duncan, Kevin. 2008. Local pilots want airstrip to stay open. *Banff Crag and Canyon*, April 29.
- Dunlap, Thomas. 1990. "Wildlife, Science, and the National Parks, 1920-1940." *Pacific Historical Review* (May): 187-202.
- . 1991. "Ecology, Nature and Canadian National Parks Policy: Wolves, Elk, and Bison as a Case Study." In *To See Ourselves/To Save Ourselves: Ecology and Culture in Canada*, Proceedings of the Annual Conference of the Association for Canadian Studies, 31 May-1 June, 1990. Association for Canadian Studies, Montreal: 139-47.
- Elliot, Nancy. 1998. "The Evolution of World Heritage in Canada." In *Changing Parks: The History, Future and Cultural Context of Parks and Heritage Landscapes*, edited by John S. Marsh and Bruce W. Hodgins. Natural Heritage/Natural History Inc.: Toronto.
- Environment Canada, and Parks Canada. 1986. *In Trust for Tomorrow: A Management Framework for Four Mountain Parks*.
- Ellis, Cathy. 1996a. Angry anglers strike at study. *Banff Crag and Canyon*, October 30.
- . 1997a. Group fights parkway closure. *Banff Crag and Canyon*, January 22: 1-2.
- . 1997b. Aviators fight to keep Bow Valley airstrip open. *Banff Crag and Canyon*, February 26: 10.
- . 1997c. Airstrip supporters defy orders. *Banff Crag and Canyon*, April 2: 3.
- . 1997d. Park plan calls for partial parkway closure. *Banff Crag and Canyon*, April 23: 1-2.
- . 1997e. Parks and CP Rail get on track to reduce animal mortality. *Banff Crag and Canyon*, April 30: 7.
- . 1997f. Banff's world heritage status in danger. *Calgary Herald*, October 2.
- . 2007. "DNA study to ID individual bears." *Rocky Mountain Outlook*, October 4.
- "Environmental Groups Decline Invitation to Four Mountain Parks Meeting." 1984. News Release, November 21.

Eyre, Marcus. 1997. *The Role and Limitations of Indicators in Environmental Decision-Making; With an Evaluation of the Banff Bow Valley Round Table Process*. Master's thesis, University of Calgary, Calgary, Alberta, Canada.

---, and Tazim B. Jamal. 2006 "Addressing Tourism Conflicts in Banff National Park: The Banff Bow Valley Round Table Process." In *Cases in Sustainable Tourism: An Experiential Approach to Making Decisions*. Edited by Irene M. Herremans. New York: The Haworth Hospitality Press.

Fennell, David A. 1999. *Ecotourism: an introduction*. Routledge: London and New York.

Forman, R.T.T. 1995. *Land mosaics: the ecology of landscapes and regions*. Cambridge University Press: Cambridge.

--- et al. 2003. *Road Ecology: Science and Solutions*. Island Press: Washington, D.C.

Foster, Janet. 1978. *Working for Wildlife: The Beginning of Preservation in Canada*. University of Toronto Press: Toronto.

Francis, Wendy. Interview by Laurie Dickmeyer. Banff, AB, 9 October 2008.

Frank, Charles. 1984. "Tourism's role weak in plan for parks." *Calgary Herald*, December 1.

Gibeau, Michael L., Anthony P. Clevenger, Stephen Herrero, and Jack Wierzchowski. 2002. "Grizzly bear response to human development and activities in the Bow River watershed, Alberta." *Biological Conservation* 103:227-236.

---, Stephen Herrero, J. Kansas, and B. Benn. 1996. "Grizzly Bear Population and Habitat Status in Banff National Park: A Report to the Banff Bow Valley Task Force." University of Calgary, Alberta, Canada.

Good news for national parks. 2000. Canada NewsWire. March 1.

Grange, Michael. 1996. Conference may put Canada on hot seat: Temagami logging, Banff development, native rights up for debate at environment meeting. *The Globe and Mail*, October 12: A9.

Great Plains Research Consultants. 1984. *Banff National Park, 1792-1965: A History*. Prepared for Parks Canada.

Green, Jeff. Interview by Laurie Dickmeyer. Burnaby, BC., 3 October 2008.

Haraway, Donna. 2007. *When Species Meet*. University of Minnesota Press: Minneapolis, Minnesota.

---. 2003. *The Companion Species Manifesto: Dogs, People, and Significant Otherness*. Prickly Paradigm Press: Chicago.

Hart, E.J. 1999. *The Place of Bows: exploring the heritage of the Banff-Bow Valley—Part 1 to 1930*. EJB Literary Enterprises Ltd.: Banff.

---. 2005. "The Great Divide: Conservation vs. Development in Alberta's Mountain National Parks, 1905-2005 an historical overview." University of Calgary, Department of History Colloquium: January 20.

Herrero, Stephen. Telephone interview by Laurie Dickmeyer. 24 September 2008.

Highwood Environmental Management Limited. 2002. Town of Banff: State of Our Environment Report 2002.

Hildebrandt, Walter. 1995. *An Historical Analysis of Parks Canada and Banff National Park, 1968-1995*. Prepared for the Banff-Bow Valley Study Task Force, Banff, Alberta.

Hilty, Jodi A., William Z. Lidicker Jr., and Adina M. Merenlender. 2006. *Corridor Ecology: The Science and Practice of Linking Landscapes for Biodiversity Conservation*. Island Press: Washington.

Hodgins, Douglas. Telephone interview by Laurie Dickmeyer. 21 October 2008.

Hodgins, Douglas W., Jeffrey E. Green, Gail Harrison, and Jillian Roulet. 2000. "From Confrontation to Conservation: The Banff National Park Experience." USDA Forest Service Proceedings RMRS-P-15-VOL 2.

Hodgins, Douglas W., and J. Douglas Cook. 2000. The Banff-Bow Valley Study: A Retrospective Review. Occasional Paper No. 10. Parks Canada, National Parks.

Jackson, Matt. 2007. "The Purpose of Parks: balancing wildlife and recreation in our national wild spaces." *Canadian Wildlife* 13(5).

Jamal, Tazim. 2004. "Conflict in Natural Area Destinations: A Critique of Representation and 'Interest' in Participatory Processes." *Tourism Geographies* 6(3):352-379.

---. 1997. Multi-party consensus processes in environmentally sensitive destinations: Paradoxes of ownership and common ground. Ph.D. diss., University of Calgary, Calgary, Alberta, Canada.

---, Stanley M. Stein, and Thomas L. Harper. 2002. "Beyond Labels: Pragmatic Planning in Multistakeholder Tourism-Environmental Conflicts." *Journal of Planning Education and Research* 22: 164-177.

Johnston, R.J, Derek Gregory, Geraldine Pratt, and Michael Watts, eds. 2000. *The Dictionary of Human Geography*. 4th edition. Blackwell Publishing, Ltd.: Oxford.

- Jones, Karen R. 2002. *Wolf Mountains: A History of Wolves along the Great Divide*. University of Calgary Press: Calgary, AB.
- Kay, Charles E., Brian Patton, and Cliff A. White. 2000. "Historical Wildlife Observations in the Canadian Rockies: Implications for Ecological Integrity." *Canadian Field-Naturalist* 114 (4): 561-583.
- Knight, Richard L., and Peter B. Landres, eds. 1998. *Stewardship Across Borders*. Island Press: Washington, D.C.
- Kopas, Paul. 2007. *Taking the Air: Ideas and Change in Canada's National Parks*. UBC Press: Vancouver and Toronto.
- Leighton, Douglas. 2001. "Background for Assessing the Status of the Banff/Central Rockies Grizzly Bear Population." Citizen's Report No. 1. Banff, AB, January 15. Douglas Leighton fonds. M133. Whyte Museum of the Canadian Rockies and Archives. Banff, AB.
- Little, Stuart J., Robert G. Harcourt, and Anthony P. Clevenger. 2002. "Do wildlife passages act as prey-traps?" *Biological Conservation* 107:135-145.
- Loo, Tina. 2006. *States of Nature: Conserving Canada's Wildlife in the Twentieth Century*. UBC Press: Vancouver and Toronto.
- Lorimer, Jamie. 2007. "Nonhuman charisma." *Environment and Planning D: Society and Space* 25:911-932.
- Lothian, W.F. 1987. *A Brief History of Canada's National Parks*. Environment Canada, Parks Canada: Ottawa.
- . 1976. *A History of Canada's National Parks*, Indian and Northern Affairs, Parks Canada: Ottawa.
- Lovelock, Brent. 2002. "Why It's Good to Be Bad: The Role of Conflict in Contributing Towards Sustainable Tourism in Protected Areas." *Journal of Sustainable Tourism* 10(1):5-30.
- Lowry, William R. 1998. *Preserving Public Lands for the Future: The Politics of Intergenerational Goods*. Georgetown University Press: Washington, D.C.
- MacEachern, Alan. 2001. *Natural Selections: National Parks in Atlantic Canada, 1935-1970*. McGill-Queen's University Press: Montreal & Kingston.
- . 1995. "Rationality and Rationalization in Canadian National Parks Predator Policy." In *Consuming Canada: readings in environmental history*. Edited by Chad and Pam Gaffield. Copp Clark: Mississauga, Ontario.

Lulka, David. 2004. "Stabilizing the herd: fixing the identity of nonhumans." *Environment and Planning D: Society and Space* 22:439-463.

Maerz, Robyn. 1994. "Then came the highways: Twinning of the Trans Canada in Banff Park." *Wild Lands Advocate* 2(1): 7, 10.

Marty, Sid. 2008. *The Black Grizzly of Whiskey Creek*. McClelland & Stewart Ltd.: Toronto.

McArthur, Douglas. 1997. Banff's future: national park or upscale malls? Ottawa agrees changes must be made or the park will be lost to future generations of Canada. *The Globe and Mail*, January 18.

Mitchell, Alanna. 1994. Banff's outlook not a pretty picture. *Calgary Herald*, December 24: A1, A7.

---. 1995. Dupuy promises to save Banff: Review of parks to be tabled soon. *The Globe and Mail*, January 17.

---. 1996. Copps moves to save Banff from extinction; Airstrip closing, demolitions ordered after crisis report. *The Globe and Mail*, October 8: A1.

---. 1997a. Banff plan aims to reverse damage; Will close airstrip, move cadet camp and bar expansion of golf course, hotel, Copps says. *The Globe and Mail*, April 17: A6.

---. 1997b. Pilots to sue over Banff plan. *The Globe and Mail*, April 18: A7.

---. 1997c. Copps blocks Banff's plan; Future of fragile park not a municipal issue, minister says. *The Globe and Mail*, September 17: A1.

---. 1997d. Ottawa weights Banff land swap, CP convention centre may hinge on lease deal. *The Globe and Mail*, December 27: A1.

Nash, Roderick. 2001. *Wilderness and the American Mind*. 4th Edition. Yale University Press: New Haven.

"National park plan unveiled by officials." 1982. *Calgary Herald*, March 16.

Nelson, J.G. 1998. "Parks and Protected Areas and Sustainable Development." In *Changing Parks: The History, Future and Cultural Context of Parks and Heritage Landscapes*, edited by John S. Marsh and Bruce W. Hodgins. Natural Heritage/Natural History Inc.: Toronto.

Pachal, D. 1985. "Points for consideration: Considering the Four Mountain Parks in a Regional & World Context." *Nature, Parks & People* 2(2): December 21.

Page, Robert. Interview by Laurie Dickmeyer. Calgary, AB., 7 October 2008.

Parks Canada. 1997a. Parks Canada's Response to the Bow Valley Study. Department of Canadian Heritage. January 24.

---. 1997b. Banff National Park Management Plan. Department of Canadian Heritage, Ottawa, Ontario.

---. 1999. OCA Panel: Draft Guidelines for the Development and Operation of Ski Areas in Banff and Jasper National Park. March 15.

---. 2000a. "*Unimpaired for Future Generations?*" *Conserving Ecological Integrity with Canada's National Parks. Volume 1: 'A Call to Action*, Report of the Panel on the Ecological Integrity of Canada's National Parks. Ottawa, ON: Minister of Public Works and Government Services.

---. 2000b. "*Unimpaired for Future Generations?*" *Conserving Ecological Integrity with Canada's National Parks. Vol. II: Setting a New Direction for Canada's National Parks*, Report of the Panel on the Ecological Integrity of Canada's National Parks. Ottawa, ON: Minister of Public Works and Government Services.

---. 2006. Parks Canada 2006 Annual Planning Forum. Lake Louise, AB.
http://www.pc.gc.ca/pn-np/ab/banff/plan/plan7_2006-TOC-TDM_e.asp. Last accessed June 14, 2009.

---. 2007. Visitation Fact Sheet. Presented at the Banff National Park Annual Planning Forum 2007. http://www.pc.gc.ca/pn-np/ab/banff/plan/plan7-07_e.asp#a2. Accessed 26. April 2009.

---. 2009. Map of Banff Wildlife Corridors. "Banff National Park of Canada: Wildlife Corridors- A 'Moving' Story." http://www.pc.gc.ca/pn-np/ab/banff/plan/plan13_e.asp. Updated 12 March 2009. Accessed 2 July 2009.

Pyne, Stephen J. 2007. *Awful Splendour: A Fire History of Canada*. UBC Press: Vancouver and Toronto.

---. 2004. "Burning Banff." *Interdisciplinary Studies in Literature and Environment* 11(2):221-248.

Reichwein, PearlAnn. 1998. "At the Foot of the Mountain: Preliminary Thoughts on the Alpine Club of Canada, 1906-1950." In *Changing Parks: The History, Future, and Cultural Context of Parks and Heritage Landscapes*. Edited by John S. Marsh and Bruce W. Hodgins. Natural Heritage/Natural History Inc.: Toronto.

Ritchie, J.R. Brent. Interview by Laurie Dickmeyer. Calary, AB., 8 October 2008.

- . 1999. "Policy Formulation at the Tourism/Environment Interface: Insights and Recommendations from the Banff-Bow Valley Study." *Journal of Travel Research* 38: 100-110.
- . 1998. "Managing the Human Presence in Ecologically Sensitive Tourism Destinations: Insights from the Banff-Bow Valley Study." *Journal of Sustainable Tourism* 6(4): 293-313.
- , Simon Hudson, and Seldjan Timur. 2002. "Public Reactions to Policy Recommendations from the Banff-Bow Valley Study: A Longitudinal Assessment." *Journal of Sustainable Tourism* 10(4): 295-308.
- Rooney, David F. 1994. Bow Valley Task Force: Common themes found. *Banff Crag and Canyon*, September 21:4.
- . 1995. Council seeks to defuse Bow Valley Study tension. *Banff Crag and Canyon*, January 11: 3.
- . 1995b. AMPPE back at Bow Valley Study table. *Banff Crag and Canyon*, February 8.
- . 1995c. Federal minister opens Bow Valley Study round table. *Banff Crag and Canyon*, February 15: 2.
- . 1995d. Study's vision a virtual reality: Participants "spirit of cooperation and collaboration" lauded. *Banff Crag and Canyon*, November 22.
- . 1995e. Bow Valley Study ready to meet next challenges. *Banff Crag and Canyon*, December 27: 12.
- . 1996a. TCH twinning getting underway. *Banff Crag and Canyon*, February 28: 4.
- . 1996b. Banff at the crossroads: Bow Valley Study is out. *Banff Crag and Canyon*, October 9: 1-2
- . 1996c. Status quo prevails in town, Mayor Hart says. *Banff Crag and Canyon*, October 16: 1-2.
- , and Claire Stirling. 1995. Study to release Valley Vision. *Banff Crag and Canyon*, October 4: 3.
- Round Table Working Book. 1995. Banff-Bow Valley Study. Canadian Parks and Wilderness Society, Calgary. Accessed 10 June 2008.
- Runte, Alfred. 1979. *National Parks: The American Experience*. University of Nebraska Press: Lincoln and London.
- Sands, David. 1993. World Heritage Site status questioned. *Banff Crag and Canyon*, September 30:3.
- "Saving Canada's wilderness—perhaps." 1996. *The Economist*. October 19: 51.

- Stirling, Claire. 1995. AMPPE may be mollified: Study adds tourism expert. *Banff Crag and Canyon*, January 25.
- Taylor, C.J. 1991. "Legislating Nature: The National Parks Act of 1930." In *To see ourselves/ to save ourselves: Ecology and culture in Canada*, edited by Rowland Lorimer, Micheal M'Gonigle, Jean-Pierre Revéret, and Sally Ross. Proceedings of the Annual Conference of the Association for Canadian Studies held at the University of Victoria. Association for Canadian Studies: Montréal.
- Teltscher, Kate. 1996. "'The fearful name of the Black Hole': fashioning an imperial myth." In *Writing India 1757-1990: The Literature of British India*, edited by Bart Moore-Gilbert. Manchester and New York: Manchester University Press.
- Thompson. 2006. "Highways and Habitat: Managing Habitat Connectivity and Landscape Permeability for Wildlife." *Science Findings* 79.
- "Three futures for the parks." 1984. *Alberta Report*, June 4:6-7.
- Tourism Bureau may ditch Bow Valley Study. 1995. *Banff Crag and Canyon*, January 11: 2.
- Town of Banff. 2002. "Town of Banff: State of Our Environment Report 2002. Prepared by Highwood Environmental Management Limited.
- Trans-Canada Twinning Given Go-Ahead... 1995. Editorial Cartoon. *Banff Crag and Canyon*, September 27:18.
- Waiser, Bill. 1995. *Park Prisoners: The Untold Story of Western Canada's National Parks, 1915-1946*. Fifth House Publishers: Saskatoon and Calgary.
- "We need reason over emotion in the face of tragedy." 2005. *Canmore Leader*, June 8. <http://www.canmoreleader.com/>. Accessed last on June 16, 2009.
- White, Cliff, and E.J. (Ted) Hart. 2007. *The Lens of Time: A repeat photography of landscape change in the Canadian Rockies*. University of Calgary Press: Calgary, Alberta.
- Zickerfoose, Sherri. 1996. Banff meets Bow Valley study in the middle. *Banff Crag and Canyon*, November 6: 1-2.