

NATIONAL PARKS: THE PARADISE OR PARADOX

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It is widely recognized that national parks are places set aside for the protection of the ecological integrity of the park environment itself, for scientific research and environmental education, and for tourism and recreational pursuits, among other things. However, national parks also face a myriad of vexing problems, including policy dilemma between use and protection, consumption inequity, etc. From a global perspective, with a strong focus on the United States and Canada, this paper discusses the paradoxical issues associated with national parks in their emerging, development, management and policies. Suggestions to resolve these paradoxes are also presented.

National Parks, paradise, paradox, policy, consumption

INTRODUCTION

In 1872, the United States established the first national park in the world—Yellowstone National Park. Since then, Australia, Canada and many other countries have set aside areas as national parks. Some of these parks were established by following the example of Yellowstone, or the ‘Yellowstone model.’ In the early years of park establishment in the United States, the main purpose of creating national parks was primarily for wilderness preservation and the provision of public recreation opportunities. A key feature of national parks is that indigenous people and uses have been excluded from parks.

However, the experience of national parks and protected areas has evolved since 1872 and more parks were established not in conformity with the original pattern of the United States. For example, among 25,000 established protected areas in the world in 1990, only 1,470 were national parks of the Yellowstone model (McNeely *et al.*, 1994). This is because in most parts of the world very few areas were devoid of human residents who already had a legitimate claim to the land. In recognition of this reality, many countries began to develop national parks in more flexible approaches. In South America, some 86 percent of national parks had permanent human populations (McNeely *et al.*, 1994). Even in the

United States, creation of national parks or their equivalents in modern times have allowed for multiple uses. For instance, until 1999, cattle grazing was allowed in Great Basin National Park (established in 1987) (Schelhas, 2001). Moreover, there is some evidence that Americans are becoming more accepting of the view that their national parks, rather than serving as ‘uninhabited wilderness’, should consider and recognize longstanding and complex relationships between people and landscape (Schelhas, 2001).

To reflect the fact that national parks were established in varied approaches, the strict standards of the United Nation’s original definition of national parks were relaxed in its new definition of 1994 (IUCN, 1994), wherein both preservation of the ecological integrity of park resources and environment and the provision of spiritual, scientific, educational, recreational and tourism opportunities were emphasized. Moreover, the IVth World Congress on National Parks and Protected Areas, which took place in Caracas, abandoned the historic view of protected areas as places set aside from the mainstream of human concerns and as islands isolated from the surrounding areas and neighboring communities (Strede & Helles, 2000). Thus, in contrast to the Yellowstone model, the “park and people” approaches have become more prevalent worldwide. According to the recent 2003 United Nation List of Protected Areas (IUCN, 2003), a total of 3,881 national parks that conform to IUCN category II (IUCN 1994) were identified worldwide.

The main reason for creating national parks varies between countries. Early national parks in Canada and the United States were established to preserve spectacular scenery and natural wonders from being privately owned and run. In the beginning, park designation in the United States was primarily justified on the basis that the lands in question were unwanted wilderness without economic values from lumbering, mining, grazing, and agriculture (Schelhas, 2001). In contrast, the first Canadian national parks, Banff (1885) and Yoho (1886), were part of Canada’s development policy to make profits from tourism. Preservation of wilderness was not a goal, and sometimes not even a by-product of park designation. In more recent years, national parks were created to protect representative ecosystems across the country. While both Canada and the United States began to place priority on the ecological integrity of park resources, in most developing countries, establishing national parks is mainly for consideration of tourism development.

The ownership of national parks varies from country to country or even within a given country. National parks in both the United States and Canada are public lands (although some national parks in the USA have private lands within their boundaries). However, there is an increasing tendency that private sectors will become more involved in the management and operation of national parks through concessionaries. In contrast, in England and Wales, national parks are basically private with the original parks being privately owned reserves. They have been managed much as the rest of the countryside, with perhaps just a little more concern for aesthetics (Bella, 1986). Today, in England and Wales, it is still common to protect parks through a series of mixed private and public property rights (McCallum, 1987).

As discussed thus far, the models and practices of national parks are as diversified as the many cultures and races throughout the world. They are created and managed by countries with varied political and social structures, economic development levels and population pressure. In one word, national parks are symbolized by culture, politics and visions that may be influenced by the socio-economic and environmental situation at that time.

While national parks have been widely recognized as the source of jobs and wealth for local communities, as recreational areas and tourism destinations for the public, as symbolic and spiritual places for citizens, as places for scientific research and monitoring, and as sanctuaries for wildlife and their habitats, just to name a few, national parks, no matter what models or practices they apply to, have faced many challenges and have been subjected to a myriad of vexing problems. Some of these problems are rooted in their inception in the idea by which national parks were advocated. For

NATIONAL PARKS

instance, national parks in many countries are of dual mandate: resource protection as well as public enjoyment. The dual mandate of national parks for use and protection is a paradox. In terms of the aspect of use, national parks are created for all, but in reality, those who belong to the upper or middle classes visit national parks most often. Thus, national parks are also a paradox of inequity. In short, national parks are more a paradox than a paradise. This paper elaborates on the paradoxical issues associated with national parks from a global perspective, with a focus on the United States and Canada, in the hope that national parks will be more effectively protected and managed by the public and for the public.

NATIONAL PARKS: PARADOX OF UNNATURAL REINVENTION

Nature has a double face: its romance and beauty make people love, appreciate and protect it, yet its unpredictability and unfriendliness make people fear it and find ways to control it. This paradox of nature creates the paradox of human beings: on the one hand, human beings have to conquer and utilize nature to protect themselves and to survive. On the other, nature's beauty inspires human beings' love and enthusiasm to protect it. Utilization and protection of nature are a long-existed paradox.

Although humans are grown out of nature, they have rarely considered themselves as part of the natural world. Rather, nature is to be subdued, to be exploited, even to be enjoyed, but humans themselves stand aside, visiting it as a spectator from a distance. Even ecologists have studied natural ecosystems as if they were apart from and wholly uninfluenced by humans. Although humans are actually part of the natural ecosystem, we are considered intruders. To enclose a natural area as a national park, whether the area is unwanted wild and wilderness or mild and natural meadow or pasture, is not only to show humans' love and appreciation to nature, but more importantly, to show their power and ability to conquer nature. Domesticating dogs, horses, pigs, or even wild lions, tigers and elephants (commonly confined in zoos or used to perform before audiences) is a prime example of this kind of behavior. If left unchecked, these subservient, tamed animals (for example, a dog) are nothing more than wild animals. Accordingly, the host of the dog would be thought to be uneducated or wild. This is the same with the establishment of national parks. Whether humans claim to be a part of nature or not, in reality, humans are the host of nature.

The earlier establishment of national parks such as Yosemite and Yellowstone in the United States reflected this philosophy of nature. The American ideas of nature trace back to its imperial mother country, Great Britain, where there are "more than one thousand private parks and notable grounds devoted to luxury and recreation" (Olwig, 1998). To enclose areas as parks is a symbol of gentlemanism. Wilderness is clearly a symbol of the unnatural. Therefore, in America, having unnaturally wild and unkempt scenery implies the whole country is a wilderness. This motivation led Americans to preserve the verdant meadows of Yosemite and Yellowstone as the first national parks (Olwig, 1998).

However, the way America established national parks was exceedingly unnatural. The establishment of Yosemite as a national park, by removing the local people from the area, was very unnatural. Many generations of Native American families had lived there; they may be considered part of nature or natural man. However, to show white people's nature, they had to remove those who are really part of nature out of nature. The establishment of the Shenandoah National Park in the 1920s and 1930s appropriated and destructed the farms within the area, some dating back to the eighteenth century, and their removal involved the uprooting of several thousand people (Olwig, 1998). These are just a few examples of the unnatural establishment of national parks in America, including the establishment of Glacier and Grand Canyon National Parks (Spence, 1999).

This also happened in some developing countries. In West Nepal, the Chhetri People were moved from their lands to make way for Lake Rara National Park (Mowforth & Munt, 1998). In China, the

country's first national park, Zhangjiajie National Forest Park, established in 1982 had permanent residents living in the area for generations. Although the local residents were allowed to continue to live in the park since its inception, a recent practice is that they have been relocated somewhere outside the park boundary (Deng et al., 2003).

NATIONAL PARKS: PARADOX OF PRODUCTION AND CONSUMPTION

One of the main purposes of establishing national parks in many countries, particularly developing countries, is to make profits or to leverage local or regional economic development. That is, parks have to use every means to attract as many visitors as possible to meet the objectives. In the United States and Canada, this particularly holds true at a time when the government appropriations were cut down, forcing parks to provide more with less. Without strong public support, national parks, with their original objectives of primarily protecting nature, can hardly survive. To have increase public support, national parks have to offer more recreational experiences and opportunities to the public under increasing public pressures for more types of activities such as all terrain vehicle (ATV) use and more convenient and sophisticated facilities.

During the course of national park development, tourism has been promoted and used as a means to justify larger government appropriations (Lemons & Stout, 1982; Schelhas, 2001). Although tourism development was thought to have minimal impact on park resources since there were few visits to parks in the beginning, it has been evidenced that park environments have become deteriorated resulting from the increasing amount of facilities and infrastructures being built within or just beyond park boundaries, as well as the increasing amount of park visitors. This paradox is much like the treadmill of production which, according to Bell (1998), refers to "a process of mutual economic pinching that gets everyone running faster but advancing only a little ... and always tending to increase production and to sideline the environment" (p. 71). With more people flooding into parks, their recreational experience could be declined because of overcrowding, resulting in less satisfaction. This phenomenon can be labeled as what Bell termed "treadmill of consumption." Thus, national parks are a paradox of production and consumption.

National Parks as a Treadmill of Production

Economic profit potential in the national parks drives the owner, in most cases, the government, to produce the treadmill of production in national parks. National parks have contributed considerably to local and national economies. For example, national parks, together with other types of protected areas, accommodate millions of visitors per annum. In Canada and the United States, an estimated 2.63 billion visitor days of recreation activity for 1996 was reported for state/provincial and national parks (Eagles *et al.*, 2000). In Alberta, in 1993-1994, visitors to the national parks and the major provincial parks spent \$1.2 billion on goods and services related to their visits (Dobson & Thompson, 1996). In 1995, five million visitors visited the Banff National Park and spent about \$870 million in the park (BBVS, 1996), yet it still seems not enough for the park. The park continues to promote its main market segments both within and around the world. It is predicted that, by the year 2020, visitors to the park will be up to 19.1 million (Cronwell & Costanza, 1996).

In China, according to incomplete statistics, in 1996, 52.99 million visitors visited forest parks (some of them are the equivalents of national parks), with direct tourism income being 6.5264 billion Chinese Yuan (approximately 820 million US dollars). Between 1992 and 1997, all forest parks have accounted for three billion visits from domestic and international visitors, generating a combined direct income of 20 billion Yuan (approximately 2.5 billion US dollars) (China State Forest Administration 1998). More recently, in 2004 all forest parks combined accommodated 147 million visitors, accounting for

NATIONAL PARKS

13.0% of total domestic visitors received in the same year. The total revenue from entry fees in the year 2004 amounts to 6.92 billion RMB, or approximately 865 million US dollars (China Green Times, 2005). Like the initial purpose of establishing national parks in Canada, the fundamental purpose for developing Chinese forest parks is to promote local economic development. Competition for more tourists among individual forest parks and other tourist destinations and resorts is very high. To attract more tourists, each individual park is forced to either invest in improvement and development of facilities and infrastructures or reduce prices to be more competitive at the risk of the natural environment.

National parks are usually created and managed by the central government of a nation, whereas the products of national parks are manufactured by the factory of governments. In most cases, it is the central government or politicians that create the treadmill of production of national parks. In Canada, it is the profit from the direct utilization of resources in the early history of national parks and the profit from tourism and recreation in the latter that drove the treadmill. In Canada, the development of national parks reflects the particular political and economic situation that many national parks were only created for profit (Bella, 1997). As part of its National Policy of 1880 and beyond, the MacDonald government and his successors' concerns were to promote economic development using natural resources. To a large degree, Canada's national park policy during this time period was grounded in the National Policy, which might be summed up in MacDonald's assertion that "the government thought it was of great importance that all this section of country should be brought at once into usefulness" (Brown, 1969). This federal government policy reflected what historian Robert Craig Brown termed the "doctrine of usefulness."

Under the "doctrine of usefulness", lumbering, mining and grazing were allowed in Canada's early national parks. Even a dam was allowed to be built in the Spray Lakes within Banff National Park. Although the legislation of 1930 had prohibited resource development in all national parks, economic exploitation still continued. In Glacier, Yoho, and Wood Buffalo National Parks, timber berths continued for a rather long period of time (Bella, 1987).

Although non-profit organizations, conservation groups, and the public have been struggling for ecological preservation against economic conservation during the two conservation movements, the federal government, driven by the profit motive, still emphasized the importance of economic values until the 1960s. It was not until the 1988 National Parks Act and the 1994 Guiding Principles and Operational Policies that place priority between use and protection was clarified. However, ironically, in 1998, it is Parks Canada who approved Canadian Pacific Hotels' plan for hotel expansion along Lake Louise in Banff National Park. The proposed development, which will obviously harm one of the crown jewels in the country's heritage, is remarkably inconsistent with what the National Parks Act says: "Protect parks 'unimpaired for future generations.'"

Recreation and tourism development is another power that drives the treadmill of production in national parks. In recent years, this power increased due to funds cutoffs from the federal government and the subsequent involvement of private sectors in the management of national parks. It is ironic that the federal government emphasizes the significance of preservation of national parks, yet still cuts the funds and personnel. In Canada, between 1994-1995 and 1999-2000, government appropriations were reduced by more than 255 million dollars (Borbey, 1999). This fund reduction stimulated individual parks to find innovative ways to obtain revenues. One possible remedy is to promote the market and get more tourists and raise prices (i.e., raise entrance fees, implement a charge for items that were not previously charged for before). Another approach is to concession part of the park's properties to private owners. Both methods potentially contribute to the degradation of natural resources. In the United States, the National Park Service has a cumulative monetary shortfall of approximately \$11.1 billion as of 1997 (Satchell, as cited in Ansson, 1998). This funding shortfall has reduced the Park Service's ability to prevent the steady deterioration of roads, buildings, sewers, and other infrastructure (Satchell, as cited in Ansson, 1998).

National Parks as a Treadmill of Consumption

National parks were also driven by consumers. Initially, a piece of land is designated as a national park for better nature conservation, but it attracts more people partly because of the information effect. Labeling a portion of land as a national park implicitly tells people that it is a nice, natural and unique place. The paradox is in the fact that national parks (at least some of them) were initially established for conservation purposes; however, it actually brings about negative impacts on the ecological integrity of parks resources and environment.

The increasing consumption of people spurs national parks to commoditize and modernize. Consequently, the parks are even more negatively impacted. It is a sort of vicious circle and, without appropriate regulation and monitoring, the parks may eventually be destroyed by its lovers. Figure 1 indicates this sort of circle. As shown, as a kind of commons, national parks are visited by few users initially. Facilities and infrastructures within and just beyond park borders must be improved to accommodate visitors. More tourists will be attracted due to parks being more accessible and having better facilities. With more facilities being developed and improved, and with more people visiting, national parks will experience increasing development and environmental degradation, and eventually will be destroyed if this process is not controlled by external intervention. Tourists are also visually and psychologically unsatisfied due to too much commercial development and degradation of the environment. This kind of vicious circle is called positive feedback or “treadmill of consumption.” With government regulation and control, the positive feedback can be transformed into negative feedback and parks will survive in the long run.

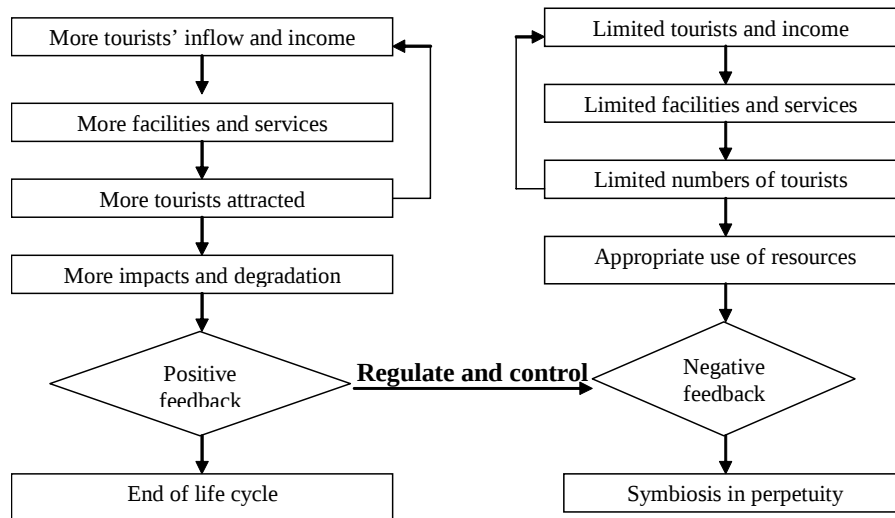


Figure 1
A frame of tragedy of national parks

The main purpose of establishing national parks is for nature preservation and public recreation. However, in most cases, people's experiences are satisfied at the advantage of nature itself. The impacts of recreation and tourism can be outlined in Figure 2, where the natural environment would be negatively impacted both directly and indirectly by visitors and associated activities and development. Due to the impacts by users, the bio/physical environment is likely to get the “bads.” In Canada, the majority of the national parks are facing significant and accelerating loss of ecological integrity, with

NATIONAL PARKS

31 out of 38 parks in 1997 reporting ecological stresses ranging from significant to severe (Parks Canada Agency, 2000). Moreover, most of Canada's national parks are also under increasing pressure to provide more and more visitor facilities and to accommodate an increasing diversity of visitor activities (Rollins & Robinson, 2002). For instance, the Banff-Bow Valley is the most developed part within the Banff National Park. A population of 7,600 is "located in some of the highest quality wildlife habitat in the park" (Banff-Bow Valley Study, 1996). This number increased to approximately 9,000 in year 2002 (Clevenger *et al.*, 2002). Various sections of the Valley are bisected by the Trans-Canada Highway, the Canadian Pacific Railway, the Bow Valley Parkway, the Icefields Parkway, and the Banff-Radium Highway. In addition, the Valley's development includes three peripheral ski hills, one golf course, the resort town of Banff, and the resort hamlet of Lake Louise. There are over 3,600 hotel rooms, 2,500 campsites, 125 restaurants and 220 retail outlets, leading the park to look more like a resort for people than a protected area for nature. The construction of Banff townsite, as well as other facilities, not only disturbed the habitats of the wildlife, but also broke their corridors and connectivity. Each year, large numbers of grizzlies and wolves are killed by traffic.

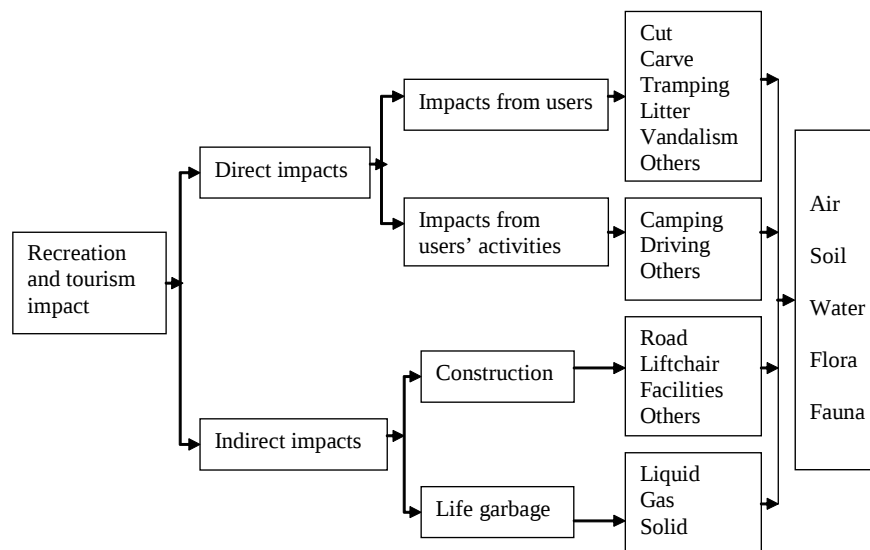


Figure 2
Recreation and tourism impacts on natural environment

Likewise, the gateway communities surrounding Yellowstone have experienced rapid and uncontrolled development since the early 1980s (Ansson, 1998). Within the 18 million-acre Greater Yellowstone Ecosystem, the population has increased by over 12% since 1990 to more than 322,000 people in 1998. Communities in the Yellowstone region were largely urbanized as a result of tourism development. Environmental problems associated with tourism urbanization such as pollution, smog, crime and overcrowded conditions are prevalent in the Yellowstone region (Ansson, 1998). Problems in the Yellowstone region mirror the complete picture of national parks in the United States. For instance, the 1980 State of the Parks Report identified seven major threats prevalent to US parks resulting from excessive visitation and use. They are aesthetic degradation, air pollution, physical removal of resources, encroachment of exotic plants and animals, physical impact of visitors, water pollution and water quantity changes, and park operations (Lemons & Stout, 1982).

As indicated above, national parks are consumed by large number of visitors. The proceeds go to individuals, but “bad” goes to the commons - national parks themselves. Both the treadmills of production and consumption of national parks will result in the “tragedy of the commons.”

NATIONAL PARKS: PARADOX OF INEQUITY

The word “park,” found in many early European languages, was originally defined as “an enclosed preserve for beasts of chase.” This term was later extended to mean a “large ornamental piece of ground, usually comprising woodland and pasture, attached to or surrounding a country house or mansion, and used for recreation, and often for keeping deer, cattle, or sheep.” (Olwig 1996, p. 382). It was a place enjoyed and owned by the rich and the aristocratic in many countries, i.e., in ancient China and England. The general public could not have and were not allowed to enter such a park.

However, in more recent history, even though the general public is allowed to access to national parks, in reality, only those who have enough discretionary time and income can frequent these places that are theoretically designated for everybody. Therefore, national parks are set aside not for everybody but only for a small percentage of the population: the middle or upper middle classes. They are the new aristocratic designation of our modern society. In a global scale, the majority of the world’s tourists are from the industrialized countries; they tend to be more affluent visitors from developing countries: 80 percent of all international travelers are nationals of just 20 countries (Mowforth & Munt, 1998). These affluent people, especially ecotourists, most often visit national parks. Within a particular country, national parks are mostly visited by a limited class of people. In America, millions live below the poverty level and, even for many middle –class families, have enough only for the essentials and nothing more (Jensen, 1995). They are not national park frequenters, as national parks are generally far away from urban areas and relatively inaccessible.

In Canada, the rapid development of Banff National Park is largely due to the advent of cars. The first automobile is said to have arrived in Banff in the summer of 1904. By 1926, almost half of the park’s visitors came by automobile. Only the wealthy could afford cars at that time. In addition, previous studies and survey results evidenced that minority groups have been historically underrepresented in national park visitation. The 1982-1983 National Recreation Survey showed that 83 percent of non-white minorities, nearly twice that of white respondents, reported having never visited a national park. In the 1986 Market Opinion Research, Hispanic Americans reported the lowest frequency of use of federal parks, forests, and recreation area. Low visitation rate by minority groups was also reported in the 1985-1987 Public Area Recreation Visitor Study. Over 94 percent of white respondents visited 5 federal recreational areas nationwide and 11 state agencies, while 2.2 percent were Hispanic American, and 2 percent were African Americans. A survey in 1997 revealed that 90 percent of Yellowstone’s visitors were white, 4.1 percent were of Asian descent, 1.5 percent were African American, 1.0 percent Hispanic, and 0.5 percent American Indian or Eskimo (Wilkinson, 2000). More recently, the National Park Service Comprehensive Survey shows that only 14% of blacks or African Americans reported to have visited national parks compared to 35% for white interviewees (National Park Service Social Science Program, 2001).

Consumption of national parks, like any other type of consumption of expensive homes, cars, clothes, computers and the like, is conspicuous consumption. According to the Abraham Maslow’s theory of the hierarchy of needs, for most people, their lower needs have to be relatively satisfied before they can move on to the higher ones (Bell, 1998). Consumption of national parks, like other leisure activities, is among the higher levels of the hierarchy of needs. It is hard to believe that a person without enough subsistence would afford to travel to a distant national park just for nothing but relaxation and refreshment. “Clothes and food” are what they want the most; love and appreciation of nature are beyond their daily agenda. This may be used to partially explain why environmentalists are principally

NATIONAL PARKS

middle-class people. They have more chances to be close to national parks and to experience the beauty of nature. To some extent, people think protecting national parks means protecting their chances of appreciation. Consumption of expensive cars, homes, etc. is material consumption and of material visibility by which people can show their social ability to command a steady flow of material goods from the environment, and demonstrate their power (Bell, 1998). Consumption of national parks means more than material conspicuous consumption as it shows people can consume nothing and pay a lot. For some people, this makes no difference from vicarious consumption. As this kind of consumption related to tourism is relatively invisible, it is hard to show others what they have consumed, and consequently harder to show their social power. To make this up, tourists tend to purchase souvenirs or take pictures or keep the teeth, fur, or feathers of hunted animals or birds that are materially visible and can be used to show off others.

People also seek to escape environmental problems. Air pollution, crowding, and noise are all known to urban residents, and a return to nature is most people's desire. However, those people with low income and people of color are more susceptible to the harms of the "concrete city" environment. They have less chance to get away from their disadvantaged surroundings than do middle income class people. They are not only the victims of environmental injustice but also the victims of national park injustice, or more broadly, leisure injustice. From the perspective of consumers, it is those who have more money to spend and have more needs and desires to fulfill are in a position to deteriorate everyone's environment. Privileged people consume goods but produce "bads". However, they have more power to transfer the "bads" to others and more chance to escape the created "bads". Suburbs, rural areas, and national parks are alternative places for such persons to escape (Freudenburg, 2005). For example, Rutzitis and Johansen (1989) studied domestic migration to counties in the United States that contain or are adjacent to federally designated wilderness areas. They found only a small percent of people (25%) considered movement to these areas for the purpose of employment opportunities while 50% of individuals thought the environment or physical amenities were important. The most important attributes of wilderness areas to new migrants were found to be scenery (83%), outdoor recreation (79%), environmental quality (78%), and pace of life (75%). Another example is that during the past three decades or so, gateway communities surrounding national parks were becoming full time or second homes for groups such as computer moguls, movie stars, trust-fund cowboys, and well-off retirees (Ansson, 1998).

The more the environment is deteriorated, the more desires people will have to look for untouched and unspoiled areas. This in turn would lead to the deterioration of the desired areas.

With increasing wealthier people relocating or having their second homes near national parks and other environmental amenities, they are, along with other visitors, relocating environmental problems to these relatively remote and natural areas. For instance, the Yellowstone region has faced numerous problems associated with gateway community urbanization such as pollution, smog, crime, and overcrowded conditions (Ansson, 1998). Their "love and appreciation of nature" could go to its opposite: nature could literally be loved to death.

NATIONAL PARKS: PARADOX OF USE AND PROTECTION ROOTED IN PARK POLICY

The paradoxes discussed above are, to a large extent, rooted in the paradoxical park policy. That is, "Congress has never resolved nor sufficiently grappled with the difficult questions of competing uses and the dilemma of preservation versus development" (Lemons & Stout, 1982), because both preservation and use were emphasized in Title 16 United States Code Section 1 enacted by Congress in 1916, thereby creating the National Park Service within the Department of the Interior. Many park scholars maintain that legislative ambiguity concerning purpose or appropriate use has been major reasons for the management dilemma (Lemons & Stout, 1982). For instance, Swinnerton (1989) stated

that formal and legislated responsibility for the protection-use dilemma that characterizes many of the world's national parks can be accredited to the US *National Park Service Organic Act* of 1916, on account of the fact that many countries adopted this paradoxical mandate. The subsequent history of national parks in the United States reflects a tenuous relationship between the intended coexistence of protection and public enjoyment.

Historically, the dual mandate of use versus protection was seen as being essentially compatible when the wildness is still abundant and use is not widespread. Consequently, there was no requirement to provide guidance through either legislation or policy as to which of these two mandates should be given priority. Canada's initial National Parks Act in 1930 followed the precedent set by the United States, and consequently the dilemma of balancing protection and use also became entrenched in legislation and policy in this country. Section 4 of the 1930 Act stated:

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

Even after the passing of the 1930 Act, Parks Canada frequently assumed the role of an entrepreneur, but by the mid 1960s many Canadians were beginning to question the appropriateness of developments such as ski areas and golf courses.

In response to these concerns, a new *National Parks Policy* (National and Historic Sites Branch Indian and Northern Affairs, 1969) acknowledged the difficulty in dealing with the dual mandates by noting that, "... administrators have never had the benefit of a clearly defined park purpose to guide them" (p. 4). Although it was recognized that increased visitor numbers would result in growing impacts on the park environment, no explicit direction was given in the policy as to which of the two parks' mandates, preservation or the provision of public enjoyment, would take priority.

Clarification at a policy level was eventually provided in the *Parks Canada Policy* document of 1979 (Parks Canada, 1979). This policy indicated that Parks Canada would assign primary consideration to the protection of heritage resources. Legislative enforcement for this new policy direction was enshrined in Bill C-30, an Act that amended the *National Parks Act* and came into force on September 16, 1988. The need for this priority was vindicated by the findings included in the first *State of the Parks 1990 Report* (Canadian Parks Service, 1991) that recognized the impact of both internal and external threats to the conditions of park resources. Overuse by park visitors was recognized as one of the significant internal pressures on national park environments. Three years later, Parks Canada's *Guiding principles and operational policies* (Canadian Heritage, 1994) specifically stated that the paramount guiding principle was ensuring ecological and commemorative integrity. To this end, science-based ecosystem management was promoted as the means by which the natural environments of the parks would be protected.

Notwithstanding these changes in policy and legislation that placed increasing priority on protecting ecological integrity, there continued to be inconsistent application of the *National Parks Act* and Parks Canada's Policy (Swinerton, 2002). This perspective was one of the key conclusions reached by the Banff-Bow Valley Task Force (Banff-Bow Valley Study, 1996). One of the other conclusions that the Task Force came to was that "a significant percentage of the population find it difficult, based on what they see around them, to understand the ecological impacts that have occurred" (Banff-Bow Valley Study, 1996).

In Canada, evidence of the growing appreciation for strengthening the protection role of national parks is provided in the *Management Policies 2001* (National Parks Service, 2000) that specify that, "in cases of doubt as to the impacts of activities on park natural resources, the Service will decide in favor of protecting the natural resources." The National Parks Act was assented to on October 20,

NATIONAL PARKS

2000. Section 4.(1) of the Act reiterates the dual mandate of national parks, as was the case in the original National Parks Act of 1930. However, under the administration section of the new Act, Section 8(2), the priority that is to be assigned to ecological integrity is unequivocally confirmed and is more encompassing than the corresponding legislation contained in the 1988 amendments to the Act. The new *Canada National Park Act* became law on February 19, 2001.

Not surprisingly, the duality of purpose that has been inherent in national park policy and legislation has provided fertile ground for debate and not infrequently litigation between the respective interests. For the most part, environmentalists and natural scientists are highly supportive of this trend and have often expressed the view that assigning priority to preservation is long overdue and that there needs to be more demonstrable action on the ground (see Swinnerton 1999, 2002).

In the case of the United States, Frome (1992) has warned against the increasing tendency to treat parks as commodities, and has advocated a “regreening” of national parks and their reinstatement as models of ecological harmony (see also Lime, 1996; Lowry, 1994; Sellars, 1997; Zube, 1996) and the promotion of those “contemplative” forms of outdoor activities that have a much greater likelihood of leaving the parks unimpaired (Smith *et al.*, 2001). Similar to what was practiced in Canada, the Bush administration has issued new draft guidelines that place the top priority on the conservation of park resources and environment while other uses such as recreation and energy development come to be secondary (Eilperin, 2006).

However, opposition to greater protection within the national parks has a long history (see Lowry, 1994). In the 1980s, Hummel (1987) argued that the US National Parks Service had been anti-democratic in its adoption of exclusionary policies whereby public access was denied and private concessions were terminated. More recently, Smith *et al.* (2001) have commented on the well-financed lobbying machinery that is representing the thrill-craft industry and the users of their products in an attempt to block and repeal any moves to restrict their use within national parks and other protected areas. More recently, in response to the new draft guidelines, strong opposition resonates among park users. For instance, Don Amador, the Western representative for the Blue Ribbon Coalition, a group representing park users nationwide, said that they do not want the administration to go back to the Clinton-era policy of putting preservation over recreation and motorized access to national parks should be allowed (Eilperin, 2006).

The debate over the need to protect the ecological integrity of national parks has been equally intense in Canada (see Dearden, 2000; Gailus, 2001; Searle, 2000). For instance, following the fact-finding visit to Banff National Park in October 1994, the Senate of Canada’s Standing Committee on Energy, the Environment and Natural Resources commented that it had “...heard firsthand how the desires of local businesses and conservation interests are on a collision course. Each has a very different view of the role of national parks” (Senate Committee of Canada, 1996). Environmental groups, such as the Canadian Parks and Wilderness Society (CPAWS) and the Banff-Bow Valley Naturalists have been critical of Parks Canada when they perceived that practice was not conforming to policy and legislation (see Gailus, 2001; Searle, 2000; Urquhart, 1998).

By contrast, advocates for public enjoyment and tourism within the national parks continue to be skeptical about the magnitude of the problem and feel that many of the restrictions on development and human use are unnecessary and unwarranted (see Association for Mountain Parks Protection and Enjoyment, AMPPE, 2000; Corbett, 1998; Gailus, 2001; Searle, 2000; Urquhart, 1998). Not surprisingly, hostile reaction to the priority being given to preservation within national parks has been most evident in the case of the Mountain Parks and specifically Banff. Similar reactions that focused on the unfair curtailment of the human use and enjoyment of the parks were submitted by AMPPE (2000) to the House of Commons Standing Committee on Canadian Heritage regarding the new national parks (Bill C-27). Parks Canada’s intent to reinstate the ecological integrity of Canada’s

National Parks has also been criticized by the Fraser Institute in its report, *Off limits: How radical environmentalists are shutting down Canada's National Parks* (LeRoy & Cooper, 2000).

DISCUSSION AND CONCLUSION

With the increase of population, the expansion of urban areas, and complexity of social and environmental problems, more people will have desires to return to nature, seeking for less polluted or untouched areas. Human beings do not fear wilderness any more. The concept of wild nature as a threat to human beings gave way to a new intensely romantic depiction that the wilderness experience is celebrated (Hannigan, 1995).

However, the increased love and appreciation of nature is a mixed blessing for both human beings and nature itself. With more wild areas being designated as national parks, and with more people flowing into these parks, these areas will become increasingly degraded. The conflicts between protection and use will become more severe.

So far, national parks still appear to be more dependent upon public support for government appropriations and social values of national parks become more important than ecological values. Indeed, national parks are symbolic of the United States and Canada. In Canada, national parks were identified as one of important national identity among Canadians. This suggests that strict restrictions on the use of national parks have been understandably not favored by park users in both countries.

It seems that the paradox embedded in the dual mandate of park policy can be resolved by placing top priority on the protection of park resources. In reality, this policy cannot stand firmly and the dilemma between use and protection will still be out there as long as government appropriations are not sufficient for park operation and management and promoting tourism has to be used by individual parks as a means for public support and revenue generation.

A park always implies recreational and tourism pursuits for the public. We would argue it is the designation of places with the title "national parks" that created those paradoxes. If compared with other types of national land uses, such as national forests where preservation is not as important as national parks and where issues associated with increasing visitor uses are also prevalent, maybe it is the significance of nature resources contained in the park draws the attention from the policy makers and park scholars. However, it is likely the label of "National Parks" that causes the problem as discussed in an earlier section. It was found that re-designation or conversion of eight National Monuments to National Parks occurred between 1979 and 2000 yielded 11,642 additional visitors annually (Weiler & Seidl, 2004). Thus, the term "national parks" assigned to a place did affect visitor use of the place.

Alternatively, an easy correction for those national parks whose main purpose is for ecosystem, biodiversity or landscape preservation is to re-title them as a "national nature reserve" to distract the public's attention. Such areas would be strictly protected and no use would be allowed in these areas. While, for the rest of national parks, tourism and recreation use should be allowed and promoted as long as this effort will not exceed the carrying capacity of the park, in doing so, the paradox of use and protection can be solved to some degree.

For recreation- and tourism-oriented parks, one potential policy correction is to privatize these national parks. People coming to national parks are usually going to see the wildness. To generate more revenues, the owners will try their best to preserve the wildness and control the visitor use and number by setting optimal entrance prices to maximize the net present value. Fuentes (2006) provided some discussion on this issue.

NATIONAL PARKS

As discussed above, wildness or national parks lovers, who believe that nature and wildness has existence value, are very much the same as churchgoers who believe the existence value of God or gods. Nelson (1997) argued that the reason that national parks and wildness caused such dilemma where churches did not lie in the fact that churches are built by private groups in America, while national parks are paid by taxpayers. So he suggests that the present national parks should be privatized and so should any future wilderness to be designated.

In terms of national parks, we must accept that the trade-off exists between the protection and utilization since there is no simple resolution to balance the two functions. In addition, we also need to realize that they are complimentary in some aspects. On the one hand, attracting more people will receive public support for the national park idea and financial supports from the income; on the other hand, more people visiting national parks at the expense of support would jeopardize the parks themselves (Ansson, 1998). How to optimize the trade-off and to maximize total benefits by balancing protection and utilization is an important issue we have to confront. We cannot maximize both at the same time.

The situation of national parks in North America is different from that in Asian countries which may not exactly follow the road that North America has traveled thus far. However, what Canada and the US have experienced and learned from the past can serve as a mirror by which Asian countries can look back and forward. For example, the “park and people” approach may be more suitable for Asian countries than is the “Yellowstone model”, given the fact that many protected areas in the Asian region have been inhabited historically by local residents. Thus, relocating local residents outside of a park boundary as practiced by China’s Zhangjiajie National Forest Park is not the simplest way to solve the complex issue on protection and use. With this said, park urbanization and overdevelopment, which are the main factors that deteriorated the park environment, should be avoided in its early development stage.

In terms of the paradox between protection and use as it relates to national parks, as we suggested in this paper, one possible solution for such paradox is to designate areas that are worthy of strict preservation to IUCN Protected Area Management Category Ia—Strict Nature Reserve or Ib—Wilderness Area, where human uses are highly restricted. However, such a designation should be made with care, in that more areas should be set aside to follow the “park and people” model. In deed, a recent inventory of protected areas worldwide shows such a trend (see Table 1). For instance, while the extent of Category II—National Parks as reported in the 2003 UN List of Protected Areas is less than it was in 1997 and so is the number of national parks in relative terms (i.e., 17.5% in 1997 vs. 5.7% in 2003), there is a considerable increase in the extent for Category VI—Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems which recognizes the important role protected areas play in the sustainable livelihoods of local people (Chape, Blyth, Fish, Fox, & Spalding, 2003). Category VI is also the predominant category in Southeast Asia, accounting for 26.8% of total protected areas in the region. In contrast, Category II—National Parks is the predominant category for North America, accounting for 36.7% of total lands designated as protected areas (Chape *et al.*, 2003).

Similar comparison can be made in other categories such as Category Ia and Ib which have decreased from 1997 to 2003, both in number and area in relative terms. Since the IUCN classification system is based on the logic that the higher the designated number of a site, the higher the human interaction and environmental modification that is acceptable (Weaver, 2001), it is evident that the “park and people” approach has been increasingly adopted in the global context as reflected by the recent list, reflecting increasing pressure on resource use as a result of population growth and economic development as evidenced by the Asian region as a whole and Southeast Asia specifically.

Table 1
Indicative ranking of 1997 and 2003 proportional percentage values
by IUCN Category (excluding non-categorized sites)

1997				2003			
Number (%)		Area (%)		Number (%)		Area (%)	
IV	28.4	II	30.3	IV	40.6	II	29.0
V	19.0	VI	27.3	III	29.1	VI	28.8
VI	15.6	IV	18.6	V	9.6	IV	19.9
II	17.5	V	8.0	Ia	7.0	V	7.0
Ia	11.2	Ia	7.41	VI	6.1	Ia	6.8
Ib	5.1	Ib	7.11	II	5.7	Ib	6.7
III	3.2	III	1.5	Ib	1.9	III	1.8

Source: Chape, Blyth, Fish, Fox, & Spalding, 2003.

REFERENCES

- Ansson, R.J. (1998). Our national parks—over crowded, under funded, and besieged with a myriad of vexing problems: How can we best fund our imperiled national park system? *Journal of Land Use & Environmental Law*. 14(1), pp. 1-52.
- Association for Mountain Parks Protection and Enjoyment [AMPPE]. (2000). *Submission to the House of Commons Standing Committee on Canadian Heritage regarding Bill C-27: An Act respecting the National Parks of Canada. May 18, 2000, Ottawa, Canada*. Retrieved August 16, 2000, from: <http://www.amppe.org/amppe/commons0518.htm>
- Banff-Bow Valley Study. (1996). Banff-Bow Valley: At the crossroads. *Technical report of the Banff-Bow Valley Task Force* (R. Page, S. Bayley, J. D. Cook, J. E. Green, & J.R.B. Ritchie). Prepared for the Honourable Sheila Copps, Minister of Canadian Heritage. Ottawa: Minister of Supply and Services Canada.
- Bell, M.M. (1998). Consumption and materialism (Chapter 2). *An Invitation to Environmental Sociology*, pp. 35-64. Thousand Oaks: Pine Forge Press.
- Bell, M.M. (1998). Money and machine (Chapter 3). *An Invitation to Environmental Sociology*, pp. 65-101. Thousand Oaks: Pine Forge Press.
- Bella, L. (1986). The politics of preservation: Creating national parks in Canada, and in the United States, England and Wales. *Planning Perspectives*, 1, 189-206.
- Borbey, P. (1999). The Parks Canada business plan. In N. Munro (Ed.), *Protected Areas in Our Modern World*, pp. 47-53. Halifax: Parks Canada.
- Brown, R.C. (1969). The doctrine of usefulness: Natural resource and national park policy in Canada, 1887-1914. In J.G.Nelson (Ed.), *Canadian Parks in Perspective*, pp. 46-62. Montreal: Harvest House.
- Canadian Heritage. (1994). *Parks Canada: Guiding Principles and Operational Policies*. Ottawa: Minister of Supply and Services Canada.
- Canadian Parks Service. (1991). *State of the Parks: 1990 Report*. Ottawa: Minister of Supply and Services Canada.
- Canadian Parks and Wilderness Society [CPAWS]. (2000). *Great day in the history of Canada's national parks*. Retrieved April 15, 2000, from: <http://www.cpaws.org/press/national-parks-copps.html>
- Chape, S., Blyth, S., Fish, L., Fox, P., & Spalding, M. (2003). *2003 United Nations List of Protected Areas*. IUCN, Gland, Switzerland and Cambridge, UK and UNEP-WCMC, Cambridge, UK.

NATIONAL PARKS

- China Green Times. (2005). *Rapid development of forest parks: A new economic growth point*. Retrieved February 14, 2005, from <http://www.chinapark.net/news/show.aspx?id=3152>
- China State Forest Administration. (1998). *Information on China National Forest Parks*. China State Forest Administration News Press, Beijing.
- Clevenger, A.P., Wierzchowski, J., Chruszcz, B., & Gunson, K. (2002). GIS-generated, expert-based models for identifying wildlife habitat linkages and planning mitigation passages. *Conservation Biology*, 16(2), pp. 503-514.
- Corbett, B. (1998). The battle for Banff: Environmentalists take off the gloves. In I. Urquhart (Ed.), *Assault on the Rockies: Environmental Controversies in Alberta*, pp. 129-136. Edmonton, AB: Rowan Books.
- Cornwell, L., & Costanza, R. (1996). A future outlook of the Banff-Bow Valley: A modeling approach to ecological, economic and social issues. In J.C. Pacas, S. Bayley, & L. Cornwell (Eds.), *Ecological Outlook Project: A Cumulative Effects Assessment and Futures Outlook of the Banff-Bow Valley*. Prepared for the Banff-Bow Valley Study, Ottawa: Department of Canadian Heritage.
- Dearden, P. (2000). Tourism, national parks and resource conflicts. In R.W. Butler & S.W. Boyd (Eds.), *Tourism and National Parks: Issues and Implications*, pp. 187-202. Chichester, England: John Wiley & Sons, Ltd.
- Deng, J., Bauer, T. & Huang, Y. (2003). Ecotourism, protected areas, and globalization: Issues and prospects in China. *ASEAN Journal on Hospitality and Tourism*, 2(1), pp. 17-32.
- Dobson, S., & Thompson, J. (1996). *Parks and Protected Areas: Their Contribution to the Alberta Economy*. Edmonton: Alberta Environment Protection.
- Eagles, P.F.J., McLean, D., & Stabler, M.J. (2000). Estimating the tourism volume and value in parks and protected areas in Canada and the USA. *George Wright Forum*, 7(3), pp. 62-66.
- Eilperin, J. (June 21, 2006). Draft of Park Rules Stresses Conservation. *The Washington Post*, A19.
- Freudenburg, W. R. (2005). Privileged access, privileged accounts: Toward a socially structured theory of resources and discourses. *Social Force*, 84(1), pp. 89-114.
- Frome, M. (1992). *Regreening the national parks*. Tucson, AZ: The University of Arizona Press.
- Fuentes, M. (2006.) Privatization of Parks. *Conservation Biology*, 20 (4), pp. 934.
- Gailus, J. (2001). The Battle for Banff. *Alberta Views*, 4, pp. 26-31.
- Green, J., Pacas, C., Cornwell, L., & Bayley, S. (Eds.) (1996). Ecological outlooks project. A cumulative effects assessment and futures outlook of the Banff Bow Valley: Final report. *Prepared for the Banff Bow Valley Study*. Ottawa: Department of Canadian Heritage.
- Hannigan, J.A. (1995). Nature, ecology and environmentalism: Constructing environmental knowledge (chapter 6). *Environmental sociology: A Social Constructionist Perspective*, pp. 107-127. London: Routledge.
- Hardin, G. (1968). The tragedy of the commons. *Science*, 162, pp. 1243-1248.
- Hummel, D. (1987). *Stealing the National Parks: The Destruction of Concessions and Public Access*. Bellevue, WA: The Free Enterprise Press.
- IUCN. (1994). *Guidelines for Protected Area Management Categories*. CNPPA with the assistance of WCMC. IUCN. Gland, Switzerland: Author.
- IUCN. (2003). *2003 United Nations List of Protected Areas*. Prepared by WCMC and WCPA. Gland, Switzerland: Author.
- Jensen, C.R. (1995). Lifestyle trends and influences. *Outdoor recreation in America* (5th ed.), pp. 29-39. Champaign, IL: Human Kinetics.
- Lemons, J., & Stout, D. (1982). National parks legislative mandate in the United States of America. *Environmental Management*, 6(3), pp. 199-207.
- LeRoy, S., & Cooper, B. (2000). Off limits: How radical environmentalists are shutting down Canada's national parks. Public Policy Sources No. 45. Vancouver, BC: The Fraser Institut.
- Lime, D. (Ed.). (1996). *Congestion and crowding in the national park system* (Minnesota Agricultural Experiment Station, Miscellaneous Publication 86-96). St. Paul, MN: University of Minnesota.
- Liu, J., Wu, C., & Lei, Z. (1991). Survey of tourist profiles in Zhangjiajie National Forest Park. In Research Group of Zhangjiajie National Forest Park (Ed.), *Studies on Zhangjiajie National Forest Park*, pp. 47-52. Beijing: Chinese Forestry Press.
- Lowry, W. R. (1994). *The Capacity for Wonder: Preserving National Parks*. Washington, DC: The Brookings Institution.
- McNeely, J.A., Harrison J., & Dingwall, P. (1994). Protecting Nature: Regional Reviews of Protected Areas. IUCN, Gland, Switzerland.
- National and Historic Sites Branch Indian and Northern Affairs. (1969). *National Parks Policy*. Ottawa: Queen's

- Printer for Canada
- National Park Service. (2000). *Management Policies 2001*. Washington, DC: U.S. Department of the Interior, National Park Service.
- National Park Service Social Science Program. (2001). The National Park Service comprehensive survey of the American public. Washington, D.C.: USAD National Park Service.
- Nelson, R.H. (1997). "Existence value" exist? Environmental economics encroaches on religion. *The Independent Review*, 1(4), pp. 499-521.
- Parks Canada. (1979). *Parks Canada Policy*. Ottawa: Minister of the Environment.
- Parks Canada Agency. (2000). "Unimpaired for future generations"? *Conserving ecological integrity with Canada's National Parks: Vol. I: A call to action*. Ottawa: Minister of Public Works and Government Services.
- Rettie, D.F. (1995). *Our National Park System: Caring for America's Greatest Natural and Historic Treasures*. Urbana, IL: University of Illinois Press.
- Schelhas, J. (2001). The USA national parks in international perspective: Have we learned the wrong lesson? *Environmental Conservation*, 28(4), pp. 300-304.
- Senate Committee of Canada. (1996). *Protecting places and people: Conserving Canada's natural heritage*. Standing Senate Committee on Energy, the Environment and Natural Resources. Ottawa: Author.
- Searle, R. (2000). *Phantom Parks: The Struggle to Save Canada's National Parks*. Toronto: Key Porter Books Limited.
- Sellars, R. W. (1997). *Preserving Nature in the National Parks: A History*. New Haven & London: Yale University Press.
- Smith, S., Rexford, K., & Long, R. (2001). Our public lands in twenty years: National parks or amusement parks? In D. Harmon (Ed.), *Crossing Boundaries in Park Management: Proceedings of the 11th Conference on Research and Resource Management in Parks and on Public Lands*. Hancock, MI: The George Wright Society.
- Spence, M.D. (1999). *Dispossessing the Wilderness: Indian Removal and the Making of the National Parks*. New York: Oxford University Press.
- Strede, S., & Helles, F. (2000). Park-people conflict resolution in Royal Chitwan National Park, Nepal: buying time at high cost? *Environmental Conservation*, 27 (4), pp. 368-381.
- Swinnerton, G. S. (1989). Recreation and conservation. In E. L. Jackson & T. L. Burton (Eds.), *Understanding Leisure and Recreation: Mapping the Past, Charting the Future*, pp. 517-565. State College, PA: Venture Publishing, Inc.
- Swinnerton, G. S. (1999). Recreation and conservation: Issues and prospects. In E. L. Jackson & T. L. Burton (Eds.), *Leisure Studies: Prospects for the Twenty-first Century*, pp. 197-229. State College, PA: Venture Publishing, Inc.
- Swinnerton, G. S. (2002). Case study: Banff and the Bow Valley. In P. Dearden & R. Rollins (Eds.), *Parks and Protected Areas in Canada: Planning and Management*, 2nd ed., pp. 240-264. Don Mills, ON: Oxford University Press.
- Urquhart, I. (Ed.). (1998). *Assault on the Rockies: Environmental Controversies in Alberta*. Edmonton: Rowan Books.
- Weaver, D. (2001). *Ecotourism*. Milton, Queensland: John Wiley & Sons Australia, Ltd.
- Weiler, S., & Seidl, A. (2004). What's in a name? Extracting econometric drives to assess the impact of national park designation. *Journal of Regional Science*, 44(2), pp. 245-262.
- Zube, E.H. (1996). Management in national parks: From scenery to science. In W. L. Halvorsen & G. E. Davis (Eds.), *Science and Ecosystem Management in the National Parks*, pp. 11-22. Tucson, AZ: The University of Arizona Press.