# International Trends in Park Tourism: The Emerging Role of Finance

## Introduction

ature-based tourism is a large and growing global industry (Ceballos-Lascurain 1998). Nature-based tourism is largely dependent upon two fundamental supply-side factors: (1) appropriate levels of environmental quality and (2) suitable levels of consumer service. This paper discusses the nature-based tourism market globally, and, more specifically, the segment of this tourism occurring in parks and protected areas.

Nature-based tourism has become sufficiently large that submarkets are apparent. Eagles (1995a) suggests, using a motive-based methodology for segmentation, that the nature-tourism market contains at least four recognizable niche markets: ecotourism, wilderness use, adventure travel, and car camping.

Ecotourism involves travel for the discovery of and learning about wild, natural environments. Wilderness travel involves personal re-creation through primitive travel in natural environments that are devoid of human disturbance. Adventure travel is personal accomplishment through the thrills of dominating dangerous environments. Car camping is safe, family travel in the interface between the wild and the civilized (Eagles) 1995a). This classification utilizes unique sets of social motives to identify the market segments. Each of the niche markets is at a different stage in the typical business cycle using Butler's (1980) tourism life-cycle analysis approach. Ecotourism and adventure tourism have considerable growth potential, according to this analysis. Wilderness travel is reaching capacity in many locales because of the requirement of very low-density use in wilderness destinations. Car camping is probably in decline, or soon will be, largely due to the peak population profile of the developed word passing beyond the ages in which camping is popular. All four of these market segments are visible in park tourism internationally. Given the different travel motivations in each submarket, it is important for planners and managers to be aware of the implications for park visitor management—for example, the levels of social grouping, the level of desired service, the level of environmental quality, and the desired environmental attributes vary amongst the four submarkets. It is important to note that such submarket differences only become visible when the naturebased tourism volume reaches a sufficiently large size.

Nature-based tourism is a large and growing segment of international tourism. In several countries where the most important export industry is tourism, nature-based tourism is a key component. These countries include Australia, Kenya, Nepal, New Zealand, Tanzania, Costa Rica, and Botswana, to name a few. Each country has global competition in this field. Recognition of such competition, combined with the growing economic importance of the associated tourism industries, leads to more thoughtful policy and institutional development. There is a constructive role played by positive and consultative policy development in nature-based and park tourism. Three examples are worthy of note: Australia, Tanzania, and New Zealand. In these countries, the phrase "ecotourism" is used frequently, with a meaning equivalent to that ascribed to "nature-based tourism" above.

The 1994 national ecotourism strategy for Australia succinctly summarizes the background to the aggressive and successful policy development in that country:

[E]cotourism offers the potential to generate foreign exchange earnings, employment, and other economic and social benefits, particularly in regional areas. It presents Australia with the opportunity to make the most of its competitive advantage, with its spectacular and diverse natural features, unique flora and fauna and diverse cultural heritage. Ecotourism can also provide resources for environmental conservation and management and an incentive for the conservation and sustainable use of public and private land (Allcock et al. 1994, 5).

To ensure the success of the national policy, the Australian government committed AUS\$10,000,000 over four years for the implementation of the strategy. Following the national lead, each state started to develop a similar regional policy, the latest being the one for New South Wales (Worboys 1997). The combination of national and state ecotourism strategies in Australia helped this country become the world's leader in naturebased tourism.

Tanzania, a nature-based tourism leader in Africa, has a draft national tourism policy document, an integrated master plan, and an infrastructure plan. The northern tourism loop from Arusha through Kilimanjaro National Park, Serengeti National Park, and Ngorongoro Conservation Area is one of the most attractive nature tourism routes in the world (Wade 1998). A key part of the national effort is to develop a second loop to national parks and wildlife reserves, such as Ruaha National Park and Selous Game Reserve, in the southern part of the country. However, in recent years Tanzania and the other nature-tourism destinations in eastern Africa are finding increasing competition from a strong, aggressive, and rapidly growing nature-tourism industry in South Africa.

New Zealand has a very successful nature-based tourism policy that involves high levels of public and private cooperation in the protection of landscapes, the management of protected areas, and the delivery of tourism services. Cessford and Thompson (2002) outline the key role that the protected area system plays in this country's tourism industry.

These three countries have government policy as the framework for a whole range of public and private activities. This policy structure fosters a suitable environment for the development of nature-based tourism generally, and park tourism specifically. Government policy plays a very important role in the development of tourism industries that are financially and ecologically sustainable.

The goal of this paper is to describe trends in international in park tourism globally, with an emphasis on the emerging role of tourism in park finance. Implications for tourism planners and managers are discussed.

## **Research Methods**

The content of this paper is based upon several research techniques. The existing literature on park tourism provides background. Access to unpublished documents and data sources of the Protected Areas Data Unit of the World Conservation Monitoring Centre in Cambridge, United Kingdom, allowed for the inclusion of up-to-date information on the status of the world's parks and protected areas. Secondary data analysis of a national survey of Canadian park finance (Van Sickle and Eagles 1998) provided information on finance, budget, and operational policies within that country. Access to a database on North American visitor use in parks allowed for presentation of current tourism levels (Eagles, McLean, and Stabler 2000). North American examples are frequently used because of the depth of the information available, and because they illustrate important principles that have a wider utility. Conversations with scholars and managers of park tourism in many countries contributed contextual and trend information. The preparation of this paper involved site visits to observe park tourism in the following countries:

Australia, Austria, Canada, Costa Rica, Cuba, Ecuador, Kenya, Indonesia, Lesotho, New Zealand, Mexico, Slovenia, Switzerland, South Africa, Tanzania, United Kingdom, United States of America, and Venezuela.

## Trends in Park Establishment

Globally, the area of land covered by the world's parks and protected areas increased considerably from 1900 to 1996. By 1996 the world's network of 30,361 parks covered an area of 13,245,527 sq km, representing 8.84% of the total land area of the planet. Protected areas have been created in 225 countries and dependent territories (Green and Paine 1997). Figure 1 shows the growth of this network over a 100-year period. The impressive growth of the world's park network is the result of the widespread acceptance of the ecological ethic (Kellert 1979) and aggressive political action. It appears that the tourism activity occurring at these sites created a self-perpetuating phenomenon of visitation, education, and desire for more parks, visitation, and education.

The global network includes a wide variety of types of protected areas, ranging from nature reserves through to protected landscapes and managed resource protection areas, within IUCN's six-category system (Figure 2; IUCN 1994). Within this system, the categories vary according to the level of human development allowed, with Category I allowing the least human impact and Category VI the most. The management categories system classifies the many different types of protected area designations in use around the world by providing a

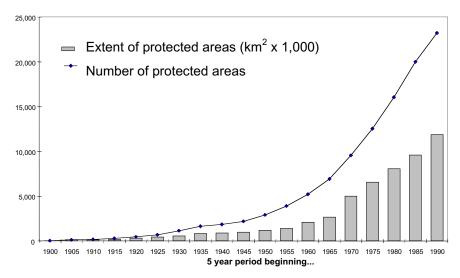


Figure 1. Cumulative growth of protected areas, 1900–1995.
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CATEGORY I	Strict Nature Reserve/Wilderness Area: protected area managed mainly for science or wilderness protection
CATEGORY Ia	Strict Nature Reserve: protected area managed mainly for science
Definition:	Area of land and/or sea possessing some outstanding or representative ecosystems, geological or physiological features and/or species, available primarily for scientific research and/or environmental monitoring.
CATEGORY II	National Park: protected area managed mainly for ecosystem protection and recreation
Definition:	Natural area of land and/or sea, designated to a) protect the ecological integrity of one or more ecosystems for present and future generations, b) exclude exploitation or occupation inimical to the purposes of designation of the area, and c) provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible.
CATEGORY III	Natural Monument: protected area managed mainly for conservation of specific natural features
Definition:	Area containing one, or more, specific natural or natural/cultural features which is of outstanding or unique value because of its inherent rarity, representative or aesthetic qualities or cultural significance.
CATEGORY IV	Habitat/Species Management Area: protected area managed mainly for conservation through management intervention
Definition:	Area of land and/or sea subject to active intervention for management purposes so as to ensure the maintenance of habitats and/or to meet the requirements of specific species.
CATEGORY V	Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation
Definition:	Area of land, with coast and sea as appropriate, where the interaction of people and nature over time has produced an area of distinct character with significant aesthetic, ecological and/or cultural value, and often with high biological diversity. Safeguarding the integrity of this traditional interaction is vital to the protection, maintenance and evolution of such an area.
CATEGORY VI	Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems
Definition:	Area containing predominantly unmodified natural systems, managed to ensure long- term protection and maintenance of biological diversity, while providing at the same time a sustainable flow of natural products and services to meet community needs.

Figure 2. IUCN categories of protected areas. Adapted from IUCN 1994; Green and Payne 1997.

common international standard based on each area's stated primary manageobjective. This facilitates ment accounting and monitoring at national, regional, and international levels. Figure 3 shows the global network listed by management category. All six categories are well represented in the network, but with national parks and resource management areas being the two categories with highest representation. Category II, national parks, is a prominent and well-known land classification covering 2.67% of the earth's land surface. A very significant portion of the world's most significant biodiversity conservation sites is located in Category I and II sites. However, all sites play some role.

Canadian ecotourism companies frequently used the name "national park" as a brand name to attract potential ecotourists to their offerings. With 30,361 parks in the world, and with 3,386 having the well-known title of a national park, it is clear that any particular political unit, such as one country or one province within a country, has a major task to get its sites recognized globally. There are many sites available for tourists. Some countries, such as Canada, have the disadvantage of having many of their sites known as provincial parks, a name unknown outside Canada, and one which is suggestive of a lower level of importance.

Unfortunately, there is no global tabulation of park usage, as there is for

IUCN category	Number	Percent	Total area in km²	Percent	Mean area in km²	Percent total land area of the world
Ia. Nature Reserve	4,395	14	982,487	7	224	0.66
Ib. Wilderness	806	3	940,344	7	1,167	0.63
II. National Park	3,386	11	4,000,825	30	1,182	2.67
III. Natural Monument	2,122	7	193,022	1	91	0.13
IV. Habitat Area	11,171	37	2,460,283	19	220	1.64
V. Protected Landscape	5,584	18	1,067,118	8	191	0.71
VI. Resource Management Area	2,897	10	3,601,447	27	1,243	2.4
Total	30,361	100	13,245,528	99	436	8.84

Figure 3. Global protected areas classified by IUCN category.

The name "national park" is closely associated with nature-based tourism, being a symbol of a highquality natural environment with a well-designed tourist infrastructure. Eagles and Wind (1994) found that park area. Therefore, it is not possible to comprehensively report on the total volume of recreational use in recent years or its change over time. However, individual country reports and personal communication with many scholars and park managers suggest tourism that park volume has increased considerably over the last 20 years (Filion, Foley, and Jaguemot 1994; Driml and Common 1995; Wells 1997; Eagles and Higgins 1998). Figure 4 shows the recent trend from Costa Rica's national parks: a curve showing increases over time. The one period of decline was due to a weak economy in the USA, causing lowered travel to Costa Rica, combined with an 800% increase in park entrance fees for foreigners. The visitation growth resumed as the economy improved, a more suitable pricing policy developed, and the market accepted the increased fees (Baez 2001). It is this author's opinion that the growth over 20 years shown in Costa Rica is representative of parkuse growth in many countries. Differences in various countries would largely reflect with the speed of the visitor-use growth, not in the overall trend of increases over time.

Eagles, McLean, and Stabler

(2000) calculated the total national and provincial/state park usage in the USA and Canada. In 1996 there was an estimated 2,621,777,237 visitordays of recreation activity in the parks and protected areas in these two countries. Clearly, the outdoor recreation occurring in the parks and protected areas in Canada and the United States is a very large and impressive activity. The 2.6 billion visitor-days of use per year represent major economic, social, and environmental impacts on society.

One of the problems limiting international comparisons is the lack of accepted standards for park tourism statistics. International standards for park tourism data collection and management and global tabulation of these data are essential for comparisons to be made. In work done for IUCN's World Commission on Protected Areas, Hornback and Eagles (1999) outlined a structure and methodology for park visitation-use measurement and reporting. This approach has now been well accepted internationally,

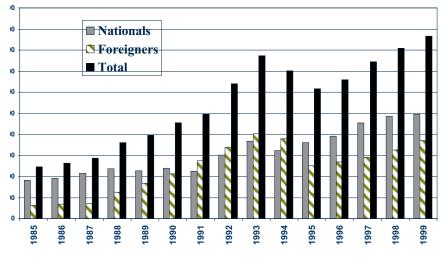


Figure 4. Visitation to national parks in Costa Rica, 1985–1999.

with many countries adopting the recommendations within their programs for measuring park tourism statistics. It is to be hoped that when the next version of the United Nations List of National Parks and Protected Areas is compiled, park visitor-use statistics, using the new standards, will be included in the global data collection effort. [Ed. note: The next edition of the List is due to be released at the Fifth World Parks Congress in September 2003.]

## Park Economics

Economics is an important component of societal decision-making, but it is often given low priority in the parks world (Wells 1997; Van Sickle and Eagles 1998). In parks the strong emphasis given to ecology is seen by many proponents as sufficient justification for public policy action. However, nature tourism is increasingly becoming important within sustainable development because of the potential of contributing to local and national economic development while also providing incentive for the conservation of biodiversity and nature in general (Wells 1997; Lindberg 1998).

Most of the world's protected areas charge low entry and use fees. These fees typically cover only a portion of the cost of protecting the resource and providing the features on which the park visitation depends (Wells 1997; Van Sickle and Eagles 1998). This pricing policy developed during a period where resource protection, a public objective that benefits all of society, was seen as the overwhelmingly important objective. If a public good benefits all, it is argued, it should be paid for by taxes on society. However, this logic falters when applied to outdoor recreation in parks, as only those who participate in outdoor recreation are beneficiaries. In a time of increasing parkland creation and widespread government financial retrenchment, it is increasingly difficult to justify continued increases in public expenditures to manage the parkland and subsidize the recreation of one segment of the population. Governments around the world are using this logic, in part, for the limiting the grants for park management. A reduction of budgets in the 1990s was documented for Canada and the USA (Eagles 1995b), as was the development of new forms of park administration and new pricing policies (Van Sickle and Eagles 1998). To address this issue, Parks Canada was reorganized in the mid-1990s into an agency with a much stronger tourism focus and new business policy and focus. The business plan summarizes the financial concept underlying the new agency with the statement that "subsidies will be phased out on services of benefit to individuals, by transferring the operation to the nonprofit voluntary or private sectors, or these services will be stabilized on a full cost recovery basis" (Parks Canada 1995, 7).

There are dramatic differences among the world's parks in terms of pricing policy, tourism income, and financial management. A global study of biosphere reserves found that only 32 of 78 responding sites charged admission fees to visitors (Tye and Gordon 1995). The fees ranged from less than US\$5 to \$110 per person per day, with the vast majority at the lower range. There was a statistically significant relationship between total direct income and the numbers of visitors for all biosphere reserves. Higher visitor numbers corresponded to higher budgets. The authors concluded that "better financed biosphere reserves are likely to be better managed, thereby attracting more tourists" (Tye and Gordon 1995, 29). Presumably those reserves with more tourists attained a higher political profile. This political strength allowed the sites to argue for more budget allocation from government. Some sites also earned income from user fees. This study is important because it shows a strong and positive relationship between protected areas' budgets and tourism levels. Generally, those parks with high levels of tourism clients attain higher levels of political power. This power is then translated into higher budget allocations. It is important to recognize that substantial management budgets are necessary in areas of high usage to avoid excessive damage to the natural environment of the parks.

Parks often supply the most important part of the nature tourism experience, but typically capture little of the economic value of the stream of economic benefits (Wells 1997). The low entry and use fees in parks are the result of many factors, one being the effort of a centralized budget allocation process in many governments. With this form of government financial management, the park management does not keep earned fees within its internal financial structure, and therefore sees little benefit in comprehensive fee collection. This budget process also contributes to a low

emphasis on park visitor management. Such issues as return rates, length of stay, visitor satisfaction, and service quality all suffer when the financial return from the visitors is not tied directly to the financial operation of a park. This lack of emphasis on visitor management results in a dwarfed park tourism industry, and one where the visitors are often seen as being a problem, rather than a valuable asset. Under such a structure each recreational visit is a threat to management structure on a limited budget that cannot respond quickly to increases or changes in park use.

Many governments see naturebased tourism as an important tool for economic development. Unfortunately, many have not invested sufficiently in staff training, infrastructure or park resources, or administrative structures that are needed to support nature tourism. This exposes sensitive sites to tourism-caused degradation (Wells 1997).

Most national tourism agencies do not keep statistics on market sectors, such as those associated with naturebased tourism and park-based tourism. Other management units, such as park agencies, seldom fill this information void. As a result, important sectors, such as nature-based tourism, are not clearly documented for the benefit of policy determination. The Canadian situation reveals this clearly. Nature-based tourism is one of the key elements of Canadian tourism. Filion et al. (1994) estimated that as much as one-quarter of the tourism expenditures in Canada can be attributed to wildlife tourism, one of the elements of nature tourism. Statistics

Canada provides quarterly Canadian tourism figures to governments, business, and the media. These data considerably raise the profile of tourism within the business sector. However, in Canada there is no system for the regular collection and distribution of information on nature-based or parkbased tourism. Neither the volumes of park visitation nor its economic impacts are systematically tabulated and made available for government and private consumption. Therefore, the importance of nature tourism in the country is severely under-rated due to lack of adequate information. The parks do not compare well to other economic generators, such as automobile manufacturing or forestry, where the volumes and economic value of the products are carefully documented and reported within a continuous stream of information. This Canadian situation is common throughout the world. The economic impact of park tourism is not well known, not well documented, and, where known, not well communicated. This leads to a severe under-representation of the importance of park tourism within the fiscal sectors of government and business.

Wells (1997) documented, globally, the economic studies available on nature tourism. Most of these studies are of individual parks or wildlife reserves. There are a few regional or national studies of the economic impact of the tourism associated with parks and reserves.

Driml and Common (1995) showed that the economic benefits of nature-based tourism in selected Australian locales far exceed the government expenditures to manage the site. This research estimated the financial value of tourism in five Australian World Heritage Areas (Great Barrier Reef, Wet Tropics, Uluru National Park, Kakadu National Park, and Tasmanian

Wilderness). The five areas studied generated tourism expenditures in 1991–1992 of AUS\$1,372,000,000. The total management budgets for the five sites were AUS\$48,700,000, and the user-fee income to the management agencies was AUS\$4,160,000 (Figure 5). Therefore, the management budgets were only 3.5% of the tourist expenditure created by the World Heritage Areas. The revenue raised through user fees represented only 8.5% of the government expenditures. This study shows the very high financial value of tourism in the five World Heritage Areas. It also reveals the low level of government expenditure for management, and the very low level of government cost recovery. Driml and Common (1995) question the ability of the existing management structure to maintain environmental quality in the face of large increases in tourism use. They point out that tourism research expenditures in Australia are very low compared to other economic generators such as agriculture and mining, both of which have a smaller national economic impact than tourism.

As discussed earlier, Eagles, McLean, and Stabler (2000) found that 2,506,451,728 visitor-days of recreation occurred in the federal and state parks and protected areas of the USA in 1996, and an additional 115,325,509 visitor-days in Canadian

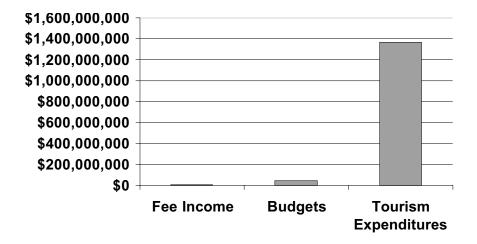


Figure 5. Economics of Australia World Heritage Sites (figures in AUS\$).

federal and provincial protected areas. massive This volume of 2,621,777,237 visitor-days, previously undocumented, reveals a high level of tourism use that was not generally known and appreciated. The economic implications of this usage are normally not calculated and therefore are certainly not well known in the fiscal policy arena of North American society. It is useful to look at some of the park tourism economic impact studies that have been done, again using Canada and the USA as case studies.

Ontario has a large and well-used provincial park system consisting of 275 parks. In 1992 the total economic output from park users and by government was CDN\$831,200,000 (OMNR and Econometric Research 1993). A total of 12,172 person-years of employment resulted from parks. This benefit was calculated from data on the 109 parks that were staffed to manage visitor use in 1992. More economic benefit would be found if the additional 166 non-staffed provincial parks, the six national parks, and the hundreds of conservation areas in Ontario were added to the calculations.

Recent research documented the expenditure level of park users to Algonquin Provincial Park (Bowman 2001), Ontario's oldest and most visited provincial park. Figure 6 shows that the expenditures per person per day varied dramatically, with day visispending the tors most, at CDN\$208.00 and car campers the least, at \$27.70. This research showed that park management earned the most income from the groups that spent the least per day: car and interior campers. Conversely, the management earned the least from the people who spent the most, day visitors and lodge visitors. Two important user groups, bus tour visitors and children's camp users, were not studied. This analysis shows the need for a complete re-evaluation of the pricing and income policy of this important park.

User Type	Expenditure	Percent of Total	Expenditure Per Day
Day Visitors	\$7.6 million	38%	\$208.00
Car Campers	\$4.8 million	24%	\$27.70
Interior Campers	\$4.0 million	20%	\$28.70
Lodge Visitors	\$2.8 million	14%	\$117.50
Cottage Leaseholders	\$0.7 million	4%	\$4,809 per year (\$13.17 per day)
Bus Trippers	Unknown	Unknown	Unknown
Children's Campers	Unknown	Unknown	Unknown

Figure 6. Algonquin Provincial Park visitor expenditures (figures in CDN\$).

The provincial economic impact was calculated by the Provincial Economic Impact Model of the Department of Canadian Heritage. The impact generated by Algonquin Park and spending by the organization Friends of Algonquin was estimated as CDN\$4.9 million in labor income, \$6.0 million to the gross domestic product (GDP), and 150 full-time person-years of employment. The provincial economic impact generated by visitor spending was estimated as \$8.1 million in labor income, \$11.9 million to the GDP, and 301 full-time personyears of employment. Therefore, the provincial economic impact was \$13 million in labor, \$17.9 in GDP, and 451 person-years of employment. This is a conservative estimate. Such data revealed an impressive economic impact, one that was quickly communicated to local community leaders by park managers. Such data provide a persuasive argument that parks can produce valuable economic as well as ecological benefits.

The most recent economic bene-

fits study for a park system undertaken in Canada was done for British Columbia (Coopers and Lybrand 1995). The study concluded that the B.C. provincial parks system is a major source of economic activity in the province. In 1993 the parks generated 5,300 jobs directly and 4,000 jobs indirectly. The 5,300 jobs created by parks are comparable to other industries such as newsprint production (4,200), metal mining (3,800), and coal mining (3,000). In 1993 the B.C. provincial parks system contributed about CDN\$430,000,000 to the provincial GDP. Park visitors reported significant benefits from recreational activities beyond the market transactions. These non-market benefits were estimated at \$670,000,000 beyond the cost of operating the system by the province. Clearly, British Columbia's provincial parks are a major economic force in the province. If the contribution of the national parks found in the province were added, then the benefits would be considerably enhanced.

Following the lead of British

Columbia, the province of Alberta undertook an economic impact calculation of tourism in its provincial parks. The results showed an economic impact that was large and similar to that of forestry in the province. The report was never officially released. It is speculated that the potential significance of the information prompted a successful lobbying effort by the forest industry to make sure that the report was not released, in order to avoid the positive political impact that would occur to parks if the report had been disseminated. This is a common problem for park managers: interagency conflicts result in suppression of data and resources with the goal of not allowing park tourism to gain the full public-policy profile that it would otherwise enjoy. This is especially a problem when park management is within a broadly defined resource management agency; least of all when parks are a stand-alone agency or administration.

Parks Canada conservatively estimates the economic impact of national parks, national historic sites and parks, and national canals to Canada's GDP at CDN\$1,250,000,000 per year. Around 30,000 person-years of employment occur because of this spending. Non-resident visitors contribute 25% of the visitor spending, or \$275,000,000 annually (Parks Canada 1995).

The consulting firm of Coopers and Lybrand (1995) calculated that in 1993 British Columbia provincial parks produced total benefits of CDN \$430,000,000. This figure included direct benefits and consumer surplus. In 1993 the parks had 22,300,000 visitor-days of activity. Therefore, each day of recreation produced an economic benefit of \$19. In 1992 the total economic output due to Ontario parks was CDN \$831,200,000 (OMNR and Econometric Research 1993). This amount included direct, indirect, and induced impacts of parks. In 1992 Ontario provincial parks had 7,000,000 visitor-days of recreation activity. Therefore, each day of recreation produced an economic benefit of \$119. The difference in impact per person between British Columbia and Ontario comes from different calculation methods. However, if one takes this range of economic benefits and applies it to the visitation of all Canada's parks, an economic benefit occurs of between CDN \$2.2 and \$14 billion. Whichever figure is used, the implications of such a large economic impact on public policy making in Canada are immense. Clearly, a standard and consistent method of calculating economic impact is required, and indeed one has been developed for use by all provincial and national park agencies in Canada (Stanley, Perron, and Smeltzer 1999).

If one assumes that the 1996 figure of 2,621,777,237 entrances to Canadian and American parks represent visitor-days of activity, and one accepts an impact range of US\$90 (OMNR and Econometric Research 1993) to US\$141 (Carlsen 1997) per day, the value for park tourism ranges between US\$236 billion and \$370 billion in Canada and the USA combined. These figures must be accepted with caution, given the limitations of the data. However, the estimates do show that park-based tourism is a very important economic activity in North American society. Even these high estimates underestimate value, because they do not include option, bequest, or existence value estimates, nor any data from Mexico.

Impressive as these figures are, they have not convinced American and Canadian governments to maintain and increase the tax-based grant levels upon which most of the park systems depend. Figure 7 shows the impacts of massive budget cuts on the 13 national, territorial, and provincial park systems in Canada during the mid-1990s (Van Sickle and Eagles 1998). All systems lost staff members. Ten closed facilities. Nine operated a smaller program, did less maintenance on facilities, privatized services, and undertook program efficiencies, such as replacement of staff with mechanized processes. The management effectiveness of the park agencies in Canada

was impaired by the budget cuts and by the associated reductions in services and programs.

In Canada there are several financial structures within the federal and provincial park agencies. Some are government agencies, while others function like crown corporations. Figure 8 shows the range in cost recovery for the 13 senior government park agencies in Canada in the early 1990s. The recovery of management costs from tourist charges varied from only 1% in British Columbia to slightly more than 50% in Saskatchewan. This variation is largely due to government policy dictating the financial structure of the agencies, not to the volume of tourism nor the amount of area being managed (Van Sickle and Eagles 1998). Those with the lowest level of cost recovery had very weak tourism expertise within the park agencies, with the result that most tourism

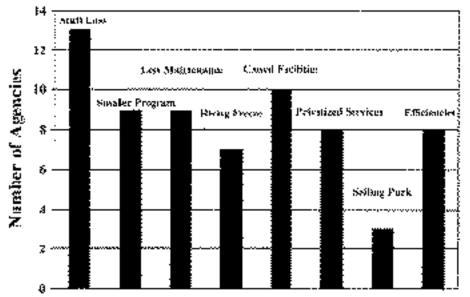


Figure 7. Impacts of budget cuts on park systems in Canada, mid-1990s.

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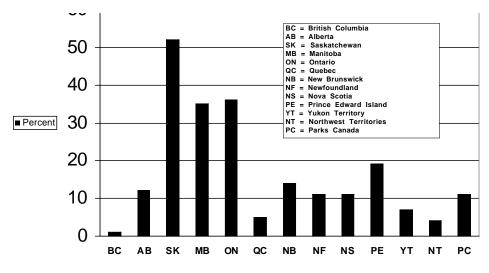


Figure 8. Cost recovery in park systems in Canada, early 1990s (provincial, territorial, and national parks).

income was earned by the private sector. Those with the highest level of cost recovery had revenue retention within the agency, and some form of corporate operations. Goodwin et al. (1995a) found that in three parks in India, Indonesia, and Zimbabwe the income from tourism was 7-24% of total expenditures. Clearly, most parks in this sample have the majority of their budget coming from sources other than tourism income. However, globally the trend is for government to demand that parks earn much higher amounts of their budget from tourism sources. Corresponding to this is the development of forms of management, such as parastatals, that allow for park agencies to function with the efficiencies of a private corporation.

Parks Canada has designed a management structure that encourages increasingly higher levels of cost recovery from tourists. To implement the new business approach, Parks Canada (1995) obtained government permission (a) to retain and reinvest all revenues; (b) plan and operate on a multi-year, non-lapsing basis; (c) increase non-tax revenues from products and services; (d) borrow against future revenue; (e) link revenues to costs; and (f) depreciate assets. The new approach moves this government agency into a management style very similar to that of a corporation, a government-owned corporation, or a parastatal. To implement the plan, new national parks legislation was passed by the Canadian Parliament in 1998.

By fiscal year 2000–2001 Parks Canada had gross revenues of CDN\$84.7 million, a 111% increase since 1994–1995 (Figure 9). Three sources of income were prominent revenue sources: entry fees, with \$30.1 million in revenues; rentals and concessions, with \$14.3 million; and camping fees, with \$10.9 million. These figures reveal that increased emphasis on revenue generation, asso-

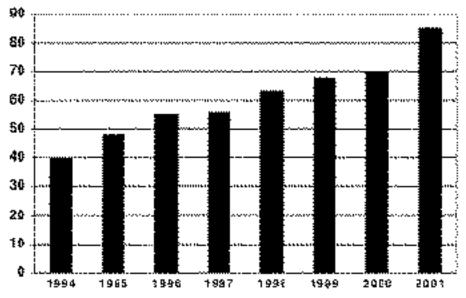


Figure 9. Parks Canada's income, 1994–2001 (figures in millions of CDN\$).

ciated with a more business-like management structure, resulted in significant revenue gains.

In 1996 Ontario Parks, Canada's largest and oldest provincial park management agency, was re-organized using a business operating model. Key components of this model included: revenue retention within the agency and multi-year retention of funds, a flattened organizational structure, increased flexibility in pricing policy, increased ability to enter into business partnerships with private corporations and pubic non-governmental organizations, the ability to receive gifts, and a governing board of directors. Moos (2002) documents that this new structure has enabled the cost recovery to increase from 56% in 1996 to 82% in 2001. In addition, the new reactive management structure results in much higher campground utilization as visitors utilize services better linked to

their needs. A very popular new service is a telephone and internet campsite booking system for all 19,000 frontcountry and 7,000 backcountry campsites in the system.

These studies show the significance of parks to economic life in Australia, USA, and Canada. The importance of the studies for public policy is obvious. However, generally there is a lack of such economic data on parks. This is a major inhibitor in public policy-making across the world. For park economics to have the policy impact that it warrants, there must be a continuous stream of up-to-date data provided. At the very least, yearly studies are required. However, quarterly figures provided to government, business, and the media would be more useful and beneficial.

### Park Finance and Pricing Policy

In most countries, park pricing pol-

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icy involves a flat fee for entrance, typically for a vehicle, or for facility use, such as for one campsite. In many cases no fees are charged, especially in low-use areas, in popular sites in the low season, or in remote areas. The fees are usually modest and not subject to market forces. Recreation allocation is typically done using a firstcome, first-served approach. In most parks, fees are also charged for specialized recreation services, equipment rental, accommodation, food services, and souvenir sales. However, most of the income from these sources goes to private enterprise, with little going to park management.

Typically, the income from tourism is well below the park budget, constituting a small percentage of the money used for management. Canadian national and provincial park fee income provided 17% of the budgets (Van Sickle and Eagles 1998), similar to the figure of 18% for the USA (Brademas and Readnor 1987). Saskatchewan, the national leader in Canada, earned 52% of expenditures in 1994–1995. In contrast, the British Columbia provincial parks agency, with a very different administrative structure, recovered only 1% of revenues. More recent figures from 1998 show that state parks in the USA recovered 33.8% of their budgets from tourism income (McLean 1999). Clearly, during the 1990s state parks in the USA earned increasingly higher percentages of their budgets from tourism fees. There is a global trend of governments encouraging and requiring parks to gain higher percentages of their budgets from tourist expenditures.

The generation of small amounts of revenue gives little incentive to government to provide adequate levels of budget for management. Laarman and Gregersen (1994) point out that this situation leads to a vicious cycle of "low fees, inadequate revenue, and deficient public investment — followed by continued low fees, revenue, and investment." The typical budget situation for parks is that of central government setting an annual budget, which in turn depends on the money available in the central treasury as well as on various political and lobbyinggroup machinations. In their studies of parks in India, Indonesia, and Zimbabwe, Goodwin et al. (1995a) found no direct relationship between park budgets and park tourism revenues. In these three countries the money collected locally was all submitted to central government.

In countries without a large taxbased subsidy for park management, tourism is often the largest source of income for park agencies. Throughout Africa, for example, the parks must earn most, if not all, of their operating budgets from tourism. This has led to a noteworthy level of innovation in park finance and pricing policy.

The booming tourism industry in South Africa expanded dramatically in the past five years and is predicted to grow substantially in the next five. Significantly, 60% of the 5.5 million foreign tourists in 1997 visited a national park or game reserve (Eagles 1999). The government of South Africa has many social objectives calling for budget allocation. As a result, all taxbased grants to the national and provincial park systems were phased out, leaving the parks with the options of either increasing income from tourism or cutting staff and services.

The South African National Parks (SANP) System was at 80% budget recovery from tourism in 1999, with government policy requiring 100% by 2001 (M. Msimang, personal communication, 21 May 1999). SANP operates an impressive array of tourism businesses in the national parks, providing a range of accommodations ranging from campgrounds to family cabins to hotels. The food and souvenir stores are agency-operated. Many of the tours are park-operated. Therefore, income is earned from entrance fees, lodging, food provision, product sales, and tours. In the future, licensing of intellectual property, such as logos and park names, is a possibility. Special promotional co-operation with associated industries, such as 4x4-vehicle companies, holds promise. This diverse set of income generators must be further utilized if SANP is to gain sufficient income to reach the public-policy goal of financial self-sufficiency. In 2000 and 2001 SANP undertook a comprehensive analysis of the costs and benefits of each of its tourism services, resulting in the launching of concession agreements with private entrepreneurs for some of the tourism services. This realignment is still underway.

Differential fees are increasingly used. Typically, foreign tourists pay more, and sometimes much more, than nationals do. At high-demand times, prices may be higher. Prices are often associated with service level, with higher prices corresponding to more services. Those agencies that have parastatal status and private-sector involvement have a much higher diversity of pricing and servicing standards.

South Africa is also a good example of the development of a wide range of standards and pricing for accommodation in and near the parks. The parks typically provide three levels of basic accommodation services: personal tent camping, recreation vehicle camping, and semi-permanent tent rentals, the latter of which typically are wood-floored, canvas tents. The parks sometimes also have three different levels of roofed accommodation, ranging from rustic cabins to cottages to hotels. Many parks provide several levels of food provision, from restaurants to fast-food outlets to grocery stores. Merchandise sales for typical outdoor gear and souvenirs are common. The private sector is heavily involved in the upper-range market, providing two or three levels of more highly priced accommodations and associated ecotourism services at private game reserves. The private reserves are often located adjacent to the parks, to take advantage of the wildlife and ecosystems of the parks as well as the well-known ecotourism profile of the location.

Table 1 summarizes the range of income generation opportunities in park tourism being utilized by park agencies and their private sector partners in various locales. Most of these are widespread, such as entrance fees and income from concessions. A few are experimental, such as the licensing of intellectual property. The names and images of national parks are very well-known and therefore valuable. Private corporations will often pay high sums for the use of these names and images. Cross-marketing occurs when one product or organization advertises in concert with another. An example could be a park agency using one type of recreational vehicle, thereby advertising to all the visitors its special qualities in the park environment. In concert, the vehicle manufacturer would publicize the park as the point is made about the special features of a vehicle.

Table 2 shows the revenue sources for Parks Canada for the 2000–2001 fiscal year (Parks Canada 2001). This agency relies heavily on three sources of income: entry fees, rentals and concessions, and camping fees. Clearly, the agency is not taking advantage of the majority of income sources shown in Table 1. For example, lucrative income sources, such as food and merchandise sales, were not utilized directly. However, some such income

Table 1. Park tourism income sources.

- Park entrance fees
- Recreation service fees, special events and special services
- Concessions
- Accommodation
- Equipment rental
- Food sales (restaurant and store)
- Parking
- Merchandise sales (equipment, clothing, souvenirs)
- Licensing of intellectual property
- Cross-product marketing

was earned indirectly through concessionaire fees.

Australia is similar, with most park agencies in the country relying on only a few of these sources of income, typically entrance fees, some recreation service fees, and accommodation fees, usually for camping (Queensland Department of the Environment 1996). Australia has a long tradition of

Source	Amount
Park entry fees	\$30,100,000
Rentals and concessions	\$14,300,000
Camping fees	\$10,900,000
Other revenue	\$6,100,000
Recreation fees	\$4,500,000
Staff housing	\$2,300,000
Interest and land sales	\$1,700,000

Table 2. Parks Canada revenue sources,2000-2001 (figures in CDN\$).

free public access to natural and cultural heritage assets, so much so that

> when the Great Barrier Reef National Marine Park proposed increase the fee for park visitors using commercial tourist operators from AUS\$1 to \$6, a Senate parliamentary committee inquiry was launched (Allison 1998). This inquiry came to a apparently self-evident conclusion: "It must be accepted that user charges can usually raise no more than a small percentage of total costs" (Allison 1998, 133). As is commonly the

case, this inquiry apparently did not recognize that there are many sources of income from tourism, as shown in Table 1.

In several countries, such as Costa

Rica and Zimbabwe, dramatic increases in park use fees were introduced without proper client consultation, resulting in vociferous objection and the subsequent roll-back of some of the increase. A lack of knowledge of pricing policy and the methods of price adjustment is common in parks, and is visibly evident in these two examples. However, Moos (2002) points out that Ontario Parks increased fees by 40%, income by 100%, and visitation substantially (Figure 10), all with virtually unanimous public acceptance. A key to the Ontario success was the fact that the visitors received higher levels of services for the new or increased fees. For example, the centralized telephone and internet booking service was a huge success because the CDN\$6 charge per registration was seen as a modest cost for a highly desirable service.

There are implications for management of higher levels of income based on tourism (Table 3). The biggest changes take place within the park agency, where a business approach to management is necessary. This includes the ability to retain and utilize most, if not all, income. Given that park visitors are the source of the income, they become more important. Their opinions on programs, length of stay, return rates, facility and program needs, and overall satisfaction become important management concerns. The managers become more aware of the need to create a product that fits market demands. Once the income becomes substantial, park management has a higher level of independence from government grants, and from government in general. Overall, park visitors attain a higher profile and enjoy more opportunities where fees are charged.

There are many factors that impede the move from a park agency dependent upon government grants to one dependent upon tourism income (Table 4). Nature is typically perceived as being common property and

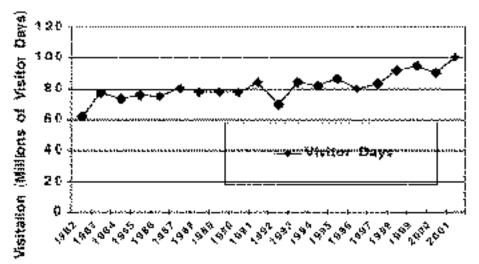


Figure 10. Visitor-use trends in Ontario provincial parks, 1982–2001.

Table 3. Implications of tourism-based park income.

- Business-based management
- Increased profile of visitors in management
- More emphasis on client satisfaction
- Service quality management
- Enhanced marketing
- Independence from government grants
- Higher fees

requiring no human management. Therefore, there should be no cost for access to common property and no need for funds for management. The concept of nature as a free good creates expectations that parks should be free and open. Historically this concept was reinforced by pricing access well below production costs. In the USA, national park use fees were prohibited by law for many years. The private sector in tourism often objects

to park use fees, and especially to any increase in fees. It is to the advantage of the private business person to have the management costs covered by public funds, rather than by charges to his clients. In addition, it is obvious to many

business people in tourism that substantial income can be earned by providing services to park visitors. These people often act like vultures, swooping into the political arena to seize the most important park assets, such as accommodation and food sales. This denies the park management valuable income sources. Furthermore, park agencies are often not equipped to undertake business management. Their expertise in marketing, pricing policy, economics and finance may be deficient. These and other factors lead many park staff to vigorously object to a their agency operating like a business. It is common for important sectors of

the public, such as environmental groups, to object to the business operation. This is often due to fears of over-commercialization. It can also be due to resistance to paying increased fees. These factors can lead to political resistance to new or increased fees. The key to overcoming the resistance is the direct allocation of the fee income to park management and to visitor services. Once people see the

#### Table 4. Imposition of tourism fees: resistance factors

- Public expectation of free nature
- History of pricing below production cost
- Private tourism-sector resistance
- Private-sector vultures
- Lack of business expertise in agency
- Public concern about commercial development
- Staff resistance to business operation

utility of their expenditures, the resistance may turn into active support.

## Tourism Planning and Management Competencies

All national parks and protected areas have some level of visitor use. This can vary from just a few hundred to millions of visitors per year. Much of the visitor management is reactive rather than proactive. The parks receive whatever visitor use that occurs, and then try to develop mechanisms to define and manage appropriate activities and levels of use. Often visitor management only takes place when some level of a problem is perceived. The parks may provide "take it or leave it" levels of tourism service. In other words, a type of recreation program or facility and a level of service is provided, with the visitor free to accept the service or to not participate. Traditionally visitors are not provided with on-going visitor input mechanisms, such as public surveys. Visitors are expected to make their opinions about activities and services known only during management plan reviews or through complaints. However, increasingly park agencies are consistently and professionally monitoring and evaluating the needs, wants, and levels of satisfaction of their visitors. Parks Canada has even gone to so far as to establish a service quality goal for all units in the system. Each park or reserve is expected to provide services of sufficient quality such that visitors indicate high levels of satisfaction with those services using a standardized visitor monitoring methodology and measurement instrument (Parks Canada 1999).

Many park agencies are weak in tourism competencies. Those that are developed are usually the result of resource managers learning on the job about visitors and tourism management. Increasingly parks are gaining professional expertise in leisure pricing policy, tourism economics, marketing, tourism management, social statistics, service quality, and in leisure studies.

Parks Canada is one of the leaders in the development of high levels of competency in tourism management throughout the agency. This increase is stimulated by the need of the agency gain operational income from to tourism and the political realization of the importance of a satisfied and mobilized constituency. In another example, Finland developed a unique visitor management approach with five components: (1) different protected areas with different roles in relation to their recreational and educational services; (2) a customer service chain model; (3) standardized customer counts, surveys, and monitoring; (4) a customer value creation process; and (5) a customer service concept (Leivo 2002).

The lowest level of tourism competency typically occurs in park agencies where the central emphasis is on resource protection and the budget comes entirely from a central government pot. Whenever a park agency moves to a tourism-based budget where income from visitor services provides the income, there is a much higher emphasis given to tourism management.

Often the private-sector operators in and near parks have higher levels of tourism market expertise than do the parks themselves. In many parts of the world the private sector is the force behind tourism in parks. It is the private sector that attracts the visitors, services their basic needs, and provides all of the tourism services. A pointed example of this comes from Costa Rica, where the government agency responsible for the national parks and wildlife refuges has low tourism competencies. It is the private sector that is largely responsible for the internationally recognized, parkbased ecotourism industry that has developed over the last 20 years. Significantly, the private, non-profit sector plays a major role in both reserve management and in tourism management in Costa Rica.

## The Future of the Park Tourism Market

Is there a market for increased levels of nature-based tourism? The largest market study ever undertaken on this subject was done for British Columbia and Alberta in Canada in 1995 (HLA and ARA 1995). For this study, the term "ecotourism" was used and was defined very broadly as "nature, adventure and cultural experiences in the countryside" (HLA and ARA 1995, p. ES-1). The study found a very large ecotourism market in Canada and the USA. In the seven metropolitan areas studied — Seattle, San Francisco, Los Angeles, Dallas, Chicago, Toronto, and Winnipeg — a market of 13.2 million potential ecotourists was found. This was much larger than anticipated, and showed that a large market is now present in North America alone.

The study found that the natural setting is the most critical factor in the determination of a quality product. The tourists showed increasing desire to find experiences in environments that were ecologically well managed. Recreational activities were important and multiple activities were desired. Mid-range accommodation was desired, and the experienced ecotourist placed much higher emphasis on the outdoor experience than on the accommodation. Competent guides and interpretive programs enhanced the quality of the travel experience. The preferred trip was long — seven days or more. Parks and the activities in them were found to be very important components of the ecotourism experience (HLA and ARA 1995).

Clearly, there is a large and growing ecotourism market in North America. Travel trends throughout the world point to growing markets, especially in North America, Europe, and Asia. Given the large potential market size, the key issue becomes one of providing travel products that fit the market, and ensuring that these products have positive economic and environmental benefits.

## **Tourism Management Structures**

In most cases, parks are managed by government agencies. In this situation, most staffers are government employees operating under a hierarchical form of decision-making. Budgets are provided each year from a central government allocation, with park income being returned to a central government pot. Often, visitor services such as accommodations, tours, and consumer products are provided by concessionaires that are licensed by the agency for a period of time. This model is widespread and reasonably effective as long as the central government provides a sufficient budget. However, it can be ineffective in several respects. The budgets are set well in advance of expenditures and are not closely tied to tourism levels, so park management is severely limited in its ability to respond to increases or other changes in visitation levels. Also, the park staff recognize that the key people to please are those who provide the budget, such as upper-level bureaucrats and politicians. As a result, the level of understanding and commitment to park visitors is often very low with this model of management. The model can also be problematic when the size and power of private-sector tourism overwhelms a politically weak government agency. In this situation, the selfish individual interests of the tourism operators can lead to overuse. Very severe environmental degradation often occurs with this model, due to the lack of a budget for the agency to handle tourism pressures.

Much experimentation with park management structures is underway. Three new models that are having success are worthy of discussion: the parastatal agency, the non-profit corporation, and the private, for-profit corporation.

The parastatal agency. Many government agencies are shifting to a parastatal form of operation, as discussed earlier for Canada. A parastatal is a corporate body within government. The parastatal makes its own policy, maintains internal financial operations, and has control over internal reporting and decision structures. Often, a government-appointed board of directors functions as the overall policy and approving body, sometimes with veto powers held by a government minister. This approach is in place in Kenya, Tanzania, South Africa, and in the Canadian province

of Ontario, to name four additional examples. Advantages over the government model are numerous. This structure is much more financially efficient. The agency can more easily and quickly establish pricing and tourism policies that enable it to more effectively tap tourism financial flows. The ability to internally handle budgets means a better understanding of the connection between service and income, between outflows and inflows of money. This structure usually leads to much higher levels of emphasis on park visitors, their needs and their satisfaction.

This parastatal approach typically has a much flatter administrative structure, with the multiple layers of the government agency replaced by only a couple of administrative layers. In the government agency model, power comes through access to the cascading flow of government dollars. People work hard to place themselves into position to influence this flow, thereby creating complex hierarchies with multiple levels of bureaucrats. The parastatal model transfers power to the park visitors, since they are the source of much of the income. People then see the advantage of leaving the central offices and moving into the front line of public service where the financial benefit starts.

The biggest disadvantage of a parastatal, as seen by some, is the loss of central control by government. Others see this as an advantage, as the administration gains increased flexibility and ability to respond to public demands.

Countries with parastatal forms of park agency management are those most likely to earn the majority of or their entire operational budget from tourism. Examples include Tanzania National Parks (TANAPA), Kenya Wildlife Service, and SANP in South Africa. However, it is important to note that in all three of these African countries various forms of foreign aid are very important for capital development in the parks.

The non-profit corporation. Some countries utilize non-profit corporations to provide some tourism services. These can take the form of membership groups that provide specialized services, such as guiding, information, and recreation management. Such groups have the advantages of a parastatal plus the additional ability to mobilize large numbers of volunteers and solicit donations. This approach is only occasionally used for entire parks, probably due to the narrow focus of such groups and their lack of ability to handle the entire range of concerns required in park management. However, in Ontario the operation of entire provincial parks have recently been turned over to a private non-governmental organization (Misery Bay Provincial Nature Reserve) and to a local community cooperative (Aaron Provincial Park). Importantly, in both parks financial income has increased dramatically, as has the local community support.

The for-profit corporation. Often, for-profit private corporations provide some tourism products and services to visitors in parks. This is frequently done on a licensed concessionaire basis, in which the company has a monopoly, or on a free-market basis, in which many companies compete for the tourist market. Occasionally, experimentation allows park development or park management by private companies. One such case is now taking place in Lesotho. The Lesotho Highlands Development Authority is constructing a series of massive dams in the country's highlands for the purpose of earning income from the export of water to the large urban areas of nearby South Africa. As a remediation effort the authority hired a consulting firm to select, plan, design, and construct a system of protected areas within the development area. Four parks are under development, with two, the Bokong Nature Reserve and Tse'hylane National Park, at the stage of tourism facility development. At the end of the contract period the private firm will turn over operational parks to the fledgling national parks agency of the country. This is the only example I have ever seen of a private company being given complete authority for the selection, planning, design, and construction of protected areas. Personal observation of the activities suggests that it is a highly effective effort, but the ability of the government park agency to manage the park and the tourism after the hand-over is in doubt.

## Park Tourism Opportunities and Challenges

What does it take to effectively manage international tourism in a national park or other form of protected area? It might be best to discuss the overall trends in park tourism by summarizing within two headings: (1) park tourism opportunities and (2) park tourism challenges. **Park tourism opportunities.** Within most park agencies the management authorities have familiarity with visitation. Most are capable of handling some international tourism. If the parks work within a competent, co-ordinated system, and have sufficient finances, it is possible to develop a co-ordinated tourism management system.

For the parks to become internadestinations, the country tional involved and its parks must project a global image of being a premier destination for outdoor recreation and nature tourism. Potential tourists require some international profile. Location is important, but poor location can be overcome with inexpensive air travel. Significant natural resources, a high market profile, and a high-quality service industry are three prerequisites for effective utilization of the international market.

The international airports, road, and water transportation system must be capable of handling significant levels of tourism traffic. Information systems need to be able to handle the whole range of needs that occur in tourism. People need lots of information. Those sites that have better information technologies are much more effective in attracting international tourism. Unfortunately, many park agencies do not control the flow of the majority of information that is provided to park visitors. Guide books, feature films, conservation groups, scientific publications, and tour companies often provide more information than does the park agency. This can be an advantage if the information is accurate and appropriate, but it can be very problematic if the park is not prepared or capable of handling the resultant tourism traffic. It can also be a problem if the information is wrong, or purposely misleading.

**Park tourism challenges**. Most parks are not now equipped to handle international tourism. Typically these parks lack tourism management capability, sufficient staff, and infrastructure. Examples to illustrate this lack of expertise are easy to find. Many parks do not have the language ability to handle tourism from foreign countries. Often very little is done to encourage and assist visitation by people from foreign countries.

Most parks have insufficient numbers of people with expertise in tourism, marketing, service quality evaluation, and international ecotourism. The level of expertise in these areas must be considerably upgraded if park agencies want to develop a vibrant, international tourism industry, one that can compete globally. Expertise in service quality management is particularly needed. The North American service industries are the global leaders in the development and application of service quality management principles. As a result, the North American consumer expects high levels of quality from service providers. Government agencies often lag far behind the private sector in applying service quality management principles, and this lack is obvious to their clients. Recent efforts in this area by Parks Canada and the national parks of Finland are laudable and worthy of emulation.

In most countries, the lack of a coordinated and co-operative park and tourism research arrangement leads to a paucity of professional expertise in the specialized area of park tourism. There is an urgent need for the development of better connections between universities and park management.

Several countries, most specifically the USA, Australia, and the United Kingdom, have aggressive tourism research, education, and development programs aimed at nature-based tourism. For example, the U.S. National Park Service has developed a suite of national cooperative research and training institutes at first-line universities (M. Soukup, personal communication, 24 November 1997). This follows similar initiatives previously undertaken by the U.S. Forest Service and the U.S. Fish and Wildlife Service.

Australia leads the way in the development of a national and state research program for sustainable tourism in parks. Parks Victoria in Australia funded a major cooperative research and education unit in at Deakin University (D. Weston, personal communication, 17 November 1997; J. Senior, personal communication, 24 July 1999). The nature tourism strategy for New South Wales proposed a strengthened link between the national park agency and universities in that state of Australia (Worboys 1997). The Australian Cooperative Research Centre for Sustainable Tourism involves university, government department, and private-sector cooperation into cutting-edge and This applied tourism research. approach is functioning very well with impressive levels of useful tourism research being published.

Many parks are unknown outside of the local area, and have weak mechanisms to provide a higher profile. Many parks have natural resources of limited international appeal. Therefore, it is reasonable to suggest that only some parks can play an international role in park tourism. Within an overall park system tourism strategy, only those with appropriate natural and managerial resources should be chosen for the promotion of international visitation. Only a few parks have an existing international reputation sufficient to attract people to the sites as primary travel destinations. Those that have the names "national park" and "World Heritage Site" have significant brand identity. Names such as "provincial park" and "conservation area" lead to confusion by many potential visitors. These names are often poorly known outside the local area. These designations may also connote low levels of resource significance and tourism infrastructure.

Parks are very important components of the nature-based tourism industry. They occupy some of the most interesting landscapes. They also have information and infrastructure that attract tourists. And they can be used within a system of linked travel routes for long-distance travel. However, the parks are seldom managed within a system of linked travel routes. For example, are the parks part of a clearly identified travel route? Is all information for all destinations on a route available at all stops along the way? Can a visitor book all accommodation and other services for an entire trip at any of the parks along the route? Typically, the answer to these questions is negative.

An obvious example of the lack of of understanding international tourism is the inadequacy of programs and facilities aimed in this direction. International visitation is not directed through a well-designed system of information for visitors. Multilingual publications are usually scarce. Staff language ability is generally in the local language and often in English, but almost never in other important languages such as German, Spanish, Chinese, or Japanese. Prebooking by international visitors is often difficult. There is often no way for international tourists to work through their travel agents to facilitate visitation to most parks. Usually visitors are expected to bring all the necessary equipment for camping or outdoor recreation, a very difficult and expensive task for trips that involve air travel. Rental or sale of equipment sometimes occurs in parks, but its availability is spotty, and when available, is difficult to access for international visitors. Easy access to guides, specialized information, or ethnic food is often limited. Co-operation with airlines, tour agencies, recreation vehicle rental companies, or hotel chains is rare. Parks usually do little to encourage, or even facilitate, the visitation by people from the country's major foreign tourism markets.

Often the parks' infrastructure is designed for the knowledgeable and experienced local person. It is difficult for foreigners to visit parks. It is very difficult for them to gain the knowledge of a park, to obtain access, to get all the necessary equipment, to learn how to use the equipment, to gain suitable transport, and then to visit most parks. In North America camping is the dominant form of accommodation in parks. The complexity of camping redirects many visitors into other forms of accommodation. However, there is very limited roofed accommodation in the parks to handle the international ecotourism market. There are often suitable accommodations outside the parks, but these are typically small in scale and difficult to access by people in remote locales of the world.

Ĝiven these challenges, it is a wonder that as many international travellers find their way to parks as do. It is clear why the Lonely Planet Guides, and other similar guidebooks, have found such a global market. However, if these challenges were tackled effectively by the parks, the numbers of international visitors could increase dramatically. Importantly, only those parks that have qualified staff, sufficient infrastructure, and the finances to handle this increase should be considered as likely candidates.

Park tourism is a global phenomenon and has a global market. Those agencies and those parks that develop suitable expertise and facilities are out-competing others. The phenomenal success of national parks and game reserves in South Africa in the last half-decade shows how a sophisticated tourism approach can successfully out-compete many other similar destinations in Africa that have equally good natural resources, but less effective tourism operations.

Some of the deficiencies outlined are due to low levels of finance. At present, the typical government agency structure results in insufficient finance to hire trained staff, develop the research base, develop the product line, advertise the product, and handle the visitors when they arrive. The parastatal agency structures developing in many countries help self-finance this endeavor when they become operational, but there are often insufficient start-up funds. Allocations from governments are necessary for the development of nature-based tourism. These allocations are most successful when made within the context of a carefully constructed national, provincial, and agency policy environment. In developing countries this is often occurring through various forms of foreign aid. The Global Environment Facility provides grants and soft loans for biodiversity conservation (GEF 1996) in parks and protected areas, with the long-term operational funds to come from tourism (The World Bank 1998).

The challenges are partly due to a nature-tourism policy void in many countries. In most countries there is an urgent need for co-ordinated national, provincial/state, and regional nature-based tourism strategies. The big exception is in Australia, which has both national and state-level ecotourism strategies that explicitly deal with the parks as international destinations (Allcock et al. 1994; Worboys 1997; Western Australian Tourism Commission 1997; Tourism Queensland 1999). The ecotourism policy and plan for the state of Queensland is one of the most mature policy documents available. These strategies identify key policy priorities, consider which sites have potential for international ecotourism, develop recommendations for market development, provide backing to financial development, encourage advanced levels of research, and schedule a multi-year development plan.

## Conclusions

If park tourism is to be given the level of public policy recognition that it deserves, a more consistent and thorough procedure for the collection of visitation, management, and economic data is required. Carlson (1997) discussed the complexities of evaluating and monitoring recreation and tourism use. In his study of economic evaluation of recreation and tourism in New South Wales he called for "a more consistent approach to data collection." The World Commission on Protected Areas has prepared three guidelines that assist with the development of park tourism and its associated recognition in public policy: measurement of economic impact and the finance of parks (IUCN 2000), measurement and reporting of public use data (Hornback and Eagles) 1999), and evaluating management effectiveness (Hockings et al. 2000). With the movement toward documentation of tourism's volume and impact, discussion is needed on the evaluation of the park management's ability to handle it. In particular, the development of management effectiveness guidelines and procedures can assist policy-makers, senior management, and the public in understanding the capability of park managers and their institutions. A framework for evaluating management effectiveness assists in the vital goal of understanding the overall management structure and effectiveness of park agencies (Hockings et al. 2000). These guidelines should be of assistance to parks agencies and all others concerned about tourism in parks.

Many parks are starting to move toward agency management structures that function like corporations within government. This involves (a) agency retention of fee and license revenue; (b) retention of budget surpluses at the end of the fiscal year; (c) pricing policies that better reflect the cost of production; and (d) more flexible arrangements with corporate and nonprofit entities outside government. It is probable that higher use fees will be charged. Over time, a much higher proportion of revenue will come from merchandise and food sales than now occurs. Innovative funding mechanisms, such as licensing of park names or cooperative public-private ventures in selling special-purpose merchandise, are underway.

Park agencies are developing tourism management competencies within their own organizations (Table 5). It is critical that the park visitors' needs and wants be understood. Most park agencies now adopt a take-it-orleave-it philosophy with respect to visitors. Certain types of facilities and services are provided, and the park client is not even asked if they are

desirable or serving their needs. An example is the lack of service quality management in most park agencies. Few agencies have specific service quality goals, with Parks Canada being a notable exception. The private sector in leisure services is rapidly moving towards management by service quality goals. All park agencies require specialists in leisure pricing policy. Pricing policy is a major field in business management, and a critical component of the operation of most corporations. Leisure marketing is the specialized field concerned with developing a solid understanding of the client, the product, and the means to match the two. Park agencies with parastatal forms of management are staffing with specialized expertise in leisure marketing. This paper emphasizes the need for tourism and resource economics expertise within a park agency. Those agencies that function like a corporation need finance expertise. Tourism management is a large and specialized field that is as broad and complex as resource management. All park agencies should develop staff expertise in this area. It may be too obvious a point to make, but it is important to note that people trained in biology, forestry, and resource management typically have no professional training in any of the fields listed in Table 5. Therefore, it is important for park agencies to retrain their existing staff, or hire such expertise.

The negative impact of tourism on park resources is less influenced by

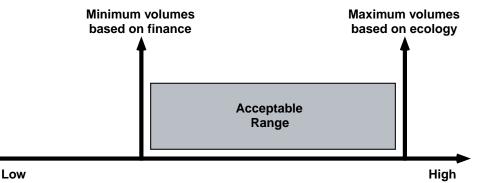
### Table 5. Tourism management competencies.

- Understanding visitors' needs and wants
- Service quality management
- Leisure pricing policy
- Leisure marketing
- Tourism and resource economics
- Finance
- Tourism management

absolute numbers of visitors than by weak tourism policy, management, and staffing. Very low levels of finance often cause the management deficiencies. It is clear that in those parks with sufficient expertise and finance, park tourism can be very competently managed, with low levels of negative environmental impact and high levels of positive economic impact. The key issue is developing a management framework that emphasizes staff expertise in tourism and financial competence. Tourism, within most park agencies, can provide significant levels of income, if the income is allowed to by the government legislative and policy framework.

Mulholland and Eagles (2002) recently proposed that the well-known issue of ecological sustainability for parks be joined to their fiscal sustainability (Figure 11). Park resource managers often assess the maximum ecological carrying capacity of reserves in terms of impacts on wildlife and other natural resources. Seldom is this discussion extended to the financial viability of the reserve. These authors propose the addition of a minimum financial carrying capacity, below which the park management is not viable due to insufficient funds. This minimum depends upon the number of tourists and the associated financial benefits they bring. Funds from donors and aid agencies, when available, would supplement the tourism income. The acceptable range of park use level is the difference between the between minimum financial return necessary and maximum negative environmental impact allowable. The authors make the argument that throughout much of the world the present situation sees much too little positive financial impact; therefore much more tourist use and income is needed in those situations. The goal of this model is to merge both fiscal and ecological concerns into one management structure.

As one contribution to the United Nations Year of Ecotourism in 2002, the U.N. Environment Program, in cooperation with the World Tourism Organization and IUCN, commissioned the preparation of guidelines for the planning and management of sustainable tourism in national parks



## Visitor Numbers



and protected areas (Eagles et al. 2002). This document provides guidelines for the development of park tourism that is financially and ecologically sustainable as well as respecting local conditions and communities.

The next 20 years will see a major shift in park management towards much more sophisticated tourism management. Such a shift will help considerably in developing a financial system that allows for competent and successful park management.

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## References

Baez, A.L. 2001. Costa Rica como destino turistico. Unpublished conference paper, Rio De Janeiro, Brazil. Bowman, M. 2001. *Economic Benefits of Nature Tourism: Algonquin Park as a Case Study*. M.A. thesis. Department of Recreation and Leisure Studies, University of Waterloo, Waterloo, Ontario.

Allcock, A., B. Jones, S. Lane, and J. Grant. 1994. *National Ecotourism Strategy*. Canberra: Commonwealth Department of Tourism.

Allison, L. 1998. Access to Heritage: User Charges in Museums, Art Galleries and National Parks. Report of the Senate Environment, Recreation, Communications & the Arts References Committee. Canberra: Parliament of the Commonwealth of Australia.

- Brademas, D.J., and J. K. Readnor. 1987. Status of fees and charges in public leisure service agencies. *Journal of Park and Recreation Administration* 7:4, 42-55.
- Butler, R.W. 1980. The concept of a tourist area cycle of evolution: Implications for management of resources. Canadian Geographer 24, 5-12.
- Ceballos-Lascurain, H. 1998. Introduction. In *Ecotourism: A Guide for Planners and Managers*. Volume 2. M. Epler-Wood and K. Lindberg, eds. North Bennington, Vt.: The Ecotourism Society, 7-10.
- Cessford, G., and A. Thompson. 2002. Managing tourism in the New Zealand protected area system. *Parks* 12:1, 26-36.
- Coopers & Lybrand Consulting. 1995. *Economic Benefits of British Columbia Parks*. Victoria, B.C.: Ministry of Environment, Lands and Parks.
- Carlsen, J. 1997. Economic evaluation of recreation and tourism in natural areas: A case study in New South Wales, Australia. *Tourism Economics* 3:3, 227-239.
- Driml, S., and M. Common. 1995. Economic and financial benefits of tourism in major protected areas. Australian Journal of Environmental Management 2:2, 19-39.
- Eagles, P.F.J. 1995a. Understanding the market for sustainable tourism. In *Linking Tourism, the Environment and Sustainability*. S.F. McCool and A.E. Watson, eds. General Technical Report INT-GTR-323. Ogden, Ut.: U.S. Department of Agriculture–Forest Service, Intermountain Research Station, 25-33.
  - -----. 1995b. Tourism and Canadian parks: Fiscal relationships. Managing Leisure 1:1, 16-27.
- ——. 1998. International ecotourism management: Using Australia and Africa as case studies. Paper presented at "Protected Areas in the 21st Century: From Islands to Networks." Albany, Western Australia, World Commission on Protected Areas.
- ——. 1999. Maloti-Drakensberg Transfrontier Conservation and Development Area Project mission report on tourism to the World Bank. Unpublished report.
- Eagles, P.F.J., and B.R. Higgins. 1998. Ecotourism market and industry structure. In *Ecotourism: A Guide for Planners and Managers*. Volume 2. M. Epler-Wood and K. Lindberg, eds. North Bennington, Vt.: The Ecotourism Society, 11-43.
- Eagles, P. F. J., S.F. McCool, and C.D. Haynes. 2002. Sustainable Tourism in Protected Areas: Guidelines for Planning and Management. Best Practice Protected Area Guidelines Series no. 8. Gland, Switzerland, and Cambridge, U.K.: IUCN.
- Eagles, P.F.J., D. McLean, and M.J. Stabler. 2000. Estimating the tourism volume and value in parks and protected areas in Canada and the USA. *The George Wright Forum* 17:4, 62-76.
- Eagles, P.F.J., and E. Wind. 1994. The advertising of Canadian ecotours in 1992. Journal of Applied Recreation Research 19:1, 67-87.
- Ethos Consulting. 1990. Adventure Travel in Eastern Canada. Ottawa, Ont.: Tourism Canada.
- Filion, F., J.P. Foley, and A.J. Jaquemot. 1994. The economics of global ecotourism. In Protected Areas Economics and Policy: Linking Conservation and Sustainable Development. M. Munasinghe and J. McNeely, eds. Washington, D.C: World Bank, 235-252.
- Global Environment Facility. 1996. Operational Strategy. Washington, D.C.: GEF.
- Goodwin, H.J., I.J. Kent, K. Parker, and M.J. Walpole. 1997a. Tourism, Conservation & Sustainable Development: Volume I, Comparative Report. Canterbury, U.K.: Durrell Institute of Conservation and Ecology, University of Kent.
- Goodwin, H.J., I.J. Kent, K. Parker, and M.J. Walpole. 1997b. Tourism, Conservation & Sustainable Development: Volume IV, The South-East Lowveld, Zimbabwe. Canterbury, U.K.: Durrell Institute of Conservation and Ecology, University of Kent.
- Green, M.J.B., and J. Paine. 1997. State of the world's protected areas at the end of the twentieth century. Paper presented at "Protected Areas in the 21st Century: From Islands to Networks." Albany, Western Australia, World Commission on Protected Areas.
- HLA Consultants and ARA Consulting Group, Inc. 1995. Ecotourism/Nature/Adventure/Culture: Alberta and British Columbia Market Demand Assessment. Vancouver, B.C.: Department of Canadian Heritage.
- Hockings, M., S. Stolton, and N. Dudley. 2000. Evaluating Effectiveness: A Framework for Assessing the Management of Protected Areas. Best Practice Protected Area Guidelines Series no. 6. Gland, Switzerland, and Cambridge, U.K.: IUCN.
- Hornback, K.E., and P.F.J. Eagles. 1999. Guidelines for Public Use Measurement and Reporting at Parks and Protected Areas. Gland, Switzerland, and Cambridge, U.K.: IUCN.
- IUCN. 1994. United Nations List of National Parks and Protected Areas. Gland, Switzerland, and Cambridge, U.K.: IUCN.
- IUCN. 2000. Financing Protected Areas: Guidelines for Protected Area Managers. Gland, Switzerland, and Cambridge, U.K.: IUCN.

- Kellert, S.R. 1979. Public Attitudes Toward Critical Wildlife Issues. Washington, D.C.: U.S. Government Printing Office.
- Laarman, J., and H. Gregersen. 1994. Pricing Policy in Nature-based Tourism. Working paper, EPAT/MUCIA. St. Paul, Minn.: University of Minnesota.
- Leivo, A. 2002. Customer management in Finland's protected areas. Parks 12:1, 37-41.
- Lindberg, K. 1998. Economic aspects of ecotourism. In *Ecotourism: A Guide for Planners and Managers*. Volume 2. M. Epler-Wood and K. Lindberg, eds. North Bennington, Vt.: The Ecotourism Society, 87-117.
- McLean, D. 1999. The 1999 Annual Information Exchange. Bloomington, Ind.: National Association of State Park Directors and the Eppley Institute, Indiana University.
- Moos, R. 2002. Ontario parks A successful business operating model. Parks 21:1, 17-25.
- Mulholland, G., and P.F.J. Eagles. 2002. African parks: Combining fiscal and ecological sustainability. *Parks* 21:1, 42-49.
- Ontario Ministry of Natural Resources and Economic Research, Ltd. 1993. Economic Impact of Provincial Parks in Ontario: A Summary Report. Peterborough, Ont.: Provincial Park Operations Section.
- Parks Canada. 1995. Framework National Business Plan 1995/1996 1999/2000. Hull, Quebec: Department of Canadian Heritage.
  - -----. 1999. Providing Client Performance Indicator Information. Hull, Quebec: Department of Canadian Heritage.
- Queensland Department of the Environment. 1996. Benchmarking and best practice program: User pays revenue. Unpublished report prepared for ANZECC Working Group on National Parks and Protected Areas Management. Brisbane: Queensland National Parks and Wildlife Service.
- Stanley, R., L. Perron, and S. Smeltzer. 1999. The Provincial Economic Impact Model. Ottawa, Ont.: The Department of Canadian Heritage. (Computer program.)
- Tourism Queensland. 1999. Queensland Ecotourism Plan. Brisbane: Tourism Queensland.
- Tye, H., and D.M. Gordon. 1995. Financial and Human Investments in Biosphere Reserve Management. Cambridge, U.K.: World Conservation Monitoring Centre.
- U.S. National Park Service. 1995. *The Money Generation Model*. Denver: Office of Social Science, Socioeconomic Studies Division, USNPS.
- Van Sickle, K., and P.F.J. Eagles. 1998. User fees and pricing policies in Canadian senior park agencies. *Tourism Management* 19:3, 225-235.
- Wade, D. 1998. An Exploration of tourism data management in Tanzania's national parks. Master's thesis. University of Waterloo, Department of Recreation and Leisure Studies, Waterloo, Ontario.
- Wells, M. P. 1997. Economic Perspectives on Nature Tourism, Conservation and Development. Environment Department Paper no. 55, Pollution and Environmental Economics Division. Washington, D.C.: The World Bank.
- Western Australian Tourism Commission. 1997. Nature Based Tourism Strategy For Western Australia. Perth, Western Australia: Department of Conservation and Land Management.
- Worboys, G.L. 1997. Draft Nature Tourism and Recreation Strategy. Hurstville, N.S.W.: Australia: New South Wales National Parks and Wildlife Service.
- The World Bank. 1998. South Africa Cape Peninsula Biodiversity Conservation Project. Project Document, Environment Group, Africa Region. Washington, D.C.: The World Bank.

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