International Trends in Park Tourism

by

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Paper prepared for
EUROPARC 2001

October 3 to 7, 2001
Hohe Tauern National Park,
Matrei, Austria

Edition 4: 17 September 2001

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Abstract. Nature-based tourism is a large and growing global industry. Much of this tourism is based in parks and other forms of protected areas. Nature-based tourism depends upon high levels of environmental quality and suitable levels of consumer service. Many countries have nature-based tourism as a very important component of their overall tourism industry. This paper discusses global park tourism trends in seven areas: park establishment, park economics, park finance and pricing policy, tourism competencies, park tourism market, visitation statistics and tourism management structures. Examples are presented to illustrate points raised.

Keywords: tourism, nature-based tourism, ecotourism, park finance, planning, policy, trends, provincial park, national park, economics, park tourism

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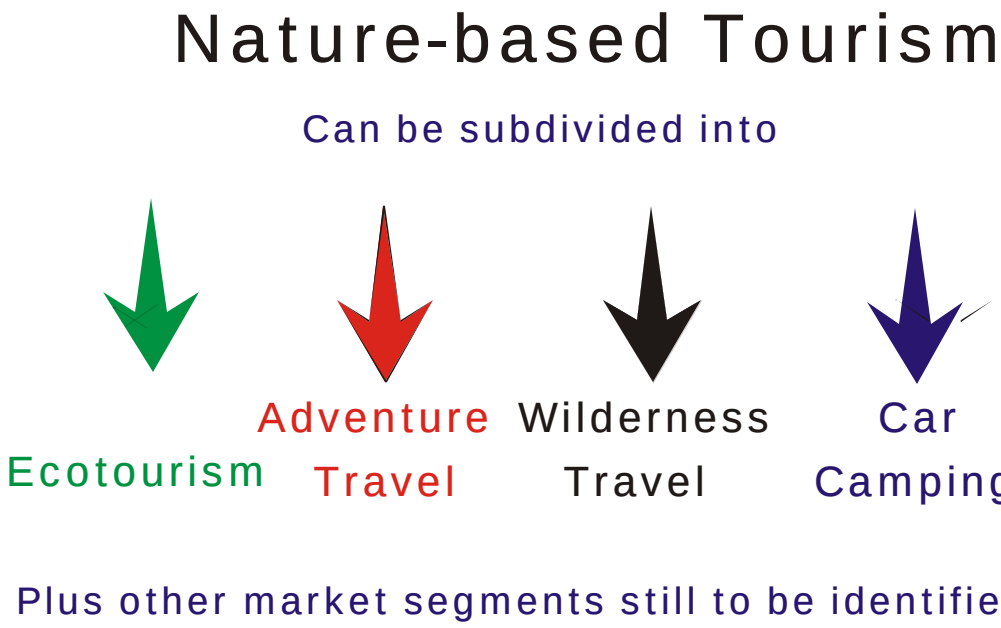
Introduction

Nature-based tourism is a large and growing global industry (Ceballos-Lascurain, 1998). Nature-based tourism is travel dependent upon the attributes of the natural environment. This paper discusses the nature-based tourism market globally, and more specifically the segment of this tourism occurring in parks and protected areas. The paper provides a global context for the detailed discussion of park tourism.

Nature-based tourism is the travel and tourism activity dependent upon the destination attributes of the natural environment. This tourism is dependent upon two fundamental components: 1) appropriate levels of environment quality and 2) suitable levels of consumer service.

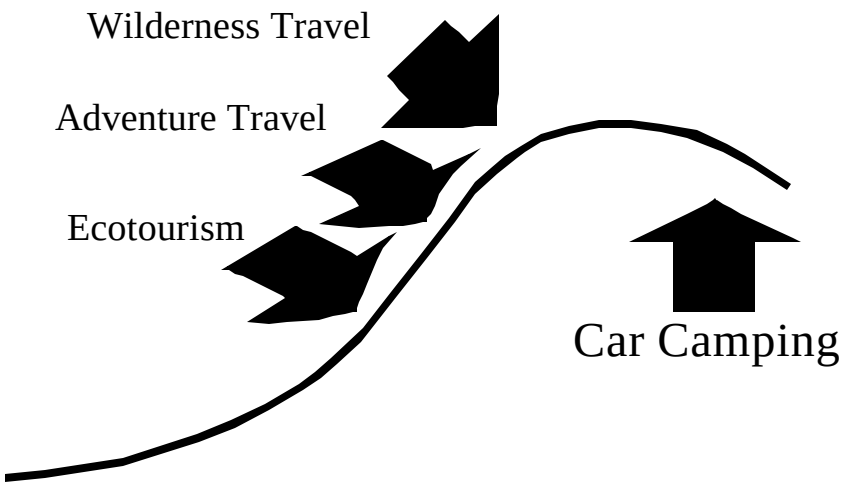
Nature-based tourism has become sufficiently large that submarkets are becoming apparent. Eagles (1995a) suggests, using a motive-based methodology for segmentation, that the nature-tourism market contains at least four recognizable niche markets: ecotourism, wilderness use, adventure travel and car camping (Figure 1).

Figure 1: Submarkets of Nature-based Tourism



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 (Figure 2) using Butler's (1980) tourism life cycle analysis

Figure 2: Business Cycle Stages for Submarkets of Nature-based Tourism



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 level 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 motivation sets 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. More detail is to be found in Eagles (1995a), but it is important to note that such

differences only become visible with the large and growing size of the nature-based tourism market.

Nature-based tourism is a large and growing component of international tourism. Several countries in the world have nature-based tourism as a key component of their most important export industry, tourism. These countries include Australia, Kenya, Nepal, New Zealand, Tanzania, Costa Rica, and Botswana; to name a few. Any one country has global competition in this field and this competition is becoming more sophisticated each year. The economic importance of the tourism industries in these countries is leading to more thoughtful policy and institutional development. It is important to recognize the constructive role that can be played by positive and consultative policy development in nature-based and park tourism. Three examples are worthy of note, Australia, Tanzania and New Zealand.

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

> ecotourism 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, p. 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).

Tanzania has a draft national tourism policy document, an integrated master plan, and an infrastructure plan. A key part of this plan is to develop a southern tourism loop to exploit the national parks and wildlife reserves, such as Ruaha National Park and Selous Game Reserve, in the southern part of the country. This new loop will complement the very successful northern loop that contains sites such as Kilimanjaro National Park, the Serengetti National Park, and the Ngorongoro Conservation Area (Wade, 1998). 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. These countries have government policy as the framework for a whole range of public and private activities, and this policy has helped foster 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. Implications for tourism planners and managers are discussed.

Method

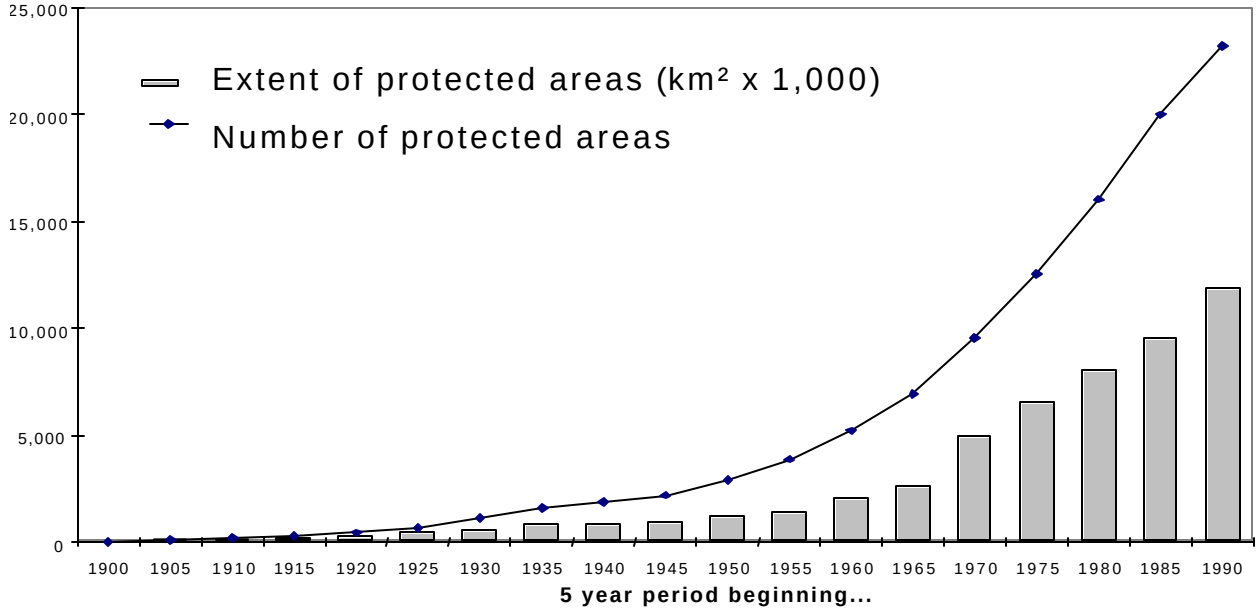
The content of this paper is based upon several research techniques. The existing literature on park tourism provides background. Access to unpublished documents and data sources of the Protected Area Data Unit of the World Conservation Monitoring Centre in Cambridge, UK allowed for the inclusion of 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 North American data base under development on visitor use in parks allowed for presentation of current tourism levels (Eagles, McLean and Stabler, 2000). These North American examples are 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, from many countries, contributed contextual and trend information. The preparation of this paper involved site visits to observe park tourism in the following countries: Australia, Canada, Costa Rica, Cuba, Ecuador, Kenya, Lesotho, New Zealand, Mexico, Slovenia, Switzerland, South Africa, Tanzania, The United Kingdom of Great Britain, The United States of America, and Venezuela.

Results

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 covers an area of 13,245,527 square kilometres, representing 8.84% of the total land area of the planet. This total land area occurs in 225 countries and dependent territories (Green & Paine, 1997). Figure 3 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.

Figure 3: Cumulative Growth of Protected Areas



The global network includes a wide variety of types of protected areas, ranging from nature reserve through to protected landscape, within the International Union for the Conservation of Nature and Natural Resources' (IUCN) six-category system (IUCN, 1994). Within this system, the categories vary according to the level of human development allowed, with Category I having least human impact and Category VI having the most (Table 1). The

management categories' system provides a common international standard for classifying the many different types of protected area designation in countries around the world, based on the primary management objective. This facilitates accounting and monitoring at national, regional and international levels. Table 2 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 in the system. National parks, Category II, is a prominent and well-known land classification covering 2.67 % of the earth's land surface. A very significant amount of the world's most significant biodiversity conservation sites is located in Category I and II sites. However, all sites play some role.

Table 1: IUCN Categories and Definitions for Protected Areas

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

Table 1: IUCN Categories and Definitions for Protected Areas	
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.

Note. Adapted from Green and Payne (1997) and IUCN (1994)

The name national park is closely associated with nature-based tourism, being a symbol of a high quality natural environment with a well-designed tourist infrastructure. Eagles and Wind (1994) found that Canadian ecotour companies frequently used the name national park as a brand name to attract potential ecotourists to their sales offerings. With 30,361 parks in the world, and with 3,386 having the well-known name 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 is a very large number of 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 suggestive of a lower level of importance.

Unfortunately, there is no global tabulation of park usage, as there is for 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 the personal communication with many scholars and park managers suggest that park tourism volume has increased considerably over time (Filion, Foley, & Jaquemot, 1994; Driml, & Common, 1995; Wells, 1997; Eagles, & Higgins, 1998). Figure 4 shows recent trends from Costa Rica National Parks; a typical curve showing increases over time. The decline was due to a weak economy in the US causing lowered travel to Costa Rica combined with an 800% increase in park entrance fees for foreigners. The visitation recovered and then increased as the economy improved and more suitable pricing policy developed (Baez, 2001).

Eagles, McLean and Stabler (2000) calculated the total national and provincial/state park usage in North America. In 1996 there was an estimated 2,621,777,237 visitor days of recreation activity in the parks and protected areas of Canada and the US. Clearly, the outdoor recreation occurring in the parks and protected areas in Canada and the United States is a very large and impressive activity. With an estimated 2.6 billion days of use per year this activity has major economic, social and environmental impacts.

However, until there are international standards for park tourism data collection and management, and global tabulation of these data, this important international activity will suffer from a lack of co-ordination in data reporting and an associated void in public policy profile.

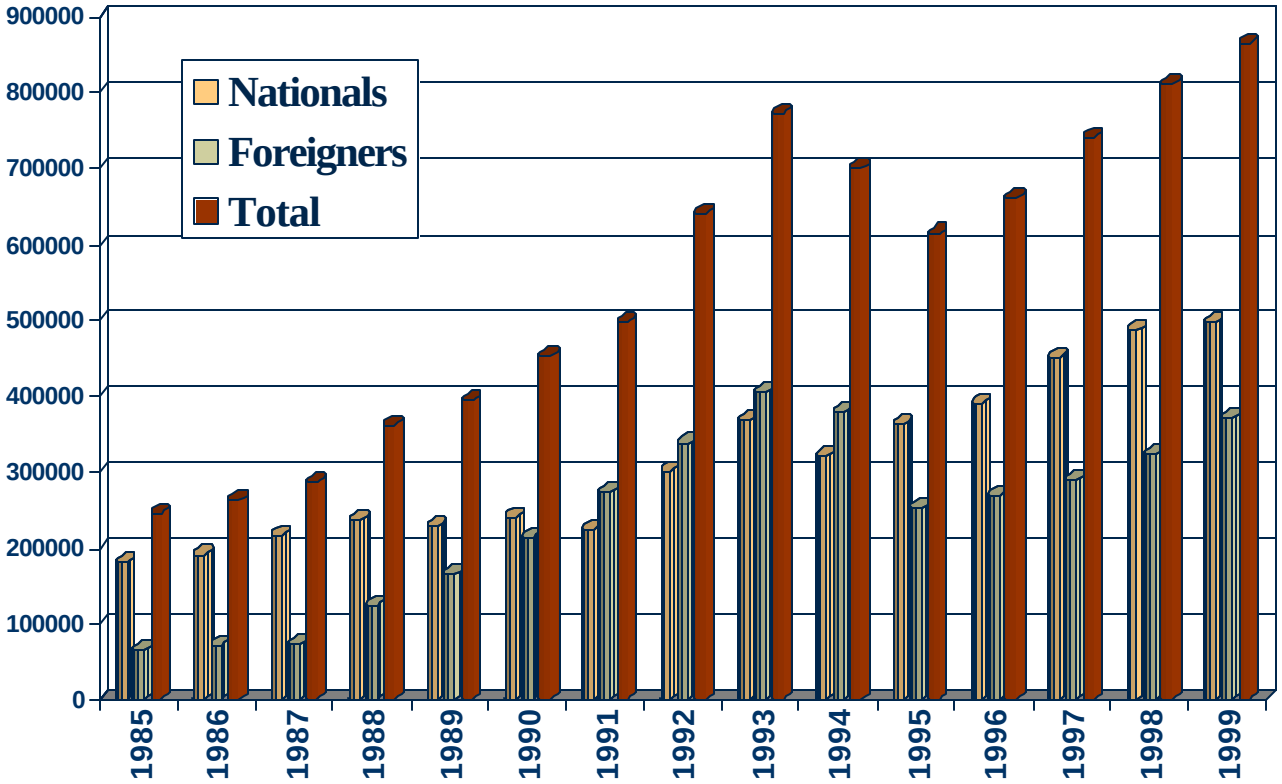
Table 2: Global Protected Areas Classified by IUCN Management Category

	Protected Areas Globally					
IUCN Category	**Number**	**Percent**	**Total Area in km^2**	**Percent**	**Mean Area in km^2**	**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	2,897	10	3,601,447	27	1,243	2.4
Total	30,361	100	13,245,528	99	436	8.84

Park Economics

Economics is an important component of societal decision-making, but it is often given

Figure 1: Visitation to Costa Rica National Parks



low priority in the parks' world (Wells, 1997; Van Sickle & Eagles, 1998). Usually in parks, the very strong emphasis given to ecology is seen by many park 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 nature conservation and biodiversity conservation (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 was seen as the overwhelmingly important objective, a public objective that benefits all of society. If a public good benefits all, it can be reasonably argued that 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 widespread government financial retrenchment, it is increasingly difficult to justify public expenditure to subsidize the recreation of one segment of the population. Governments around the world are using this logic, in part, for the reduction or freezing of grants for park management. The reduction of budgets has been documented in Canada and the USA (Eagles, 1995b) as has the development of new forms of park administration and new pricing policies (Van Sickle and Eagles, 1998). The Parks Canada business plan summarizes this concept 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, p. 7).

There are dramatic differences amongst 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 visitors admission fees (Tye and Gordon, 1995). The fees ranged from less than $5.00 to $110 per person per day, in US funds, 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, p. 29). Presumably those reserves with more tourists gained 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 gain 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 also contributes to a low emphasis on park visitor management. Such issues as return rates, length of stay, visit 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 proper emphasis on visitor management results in a dwarfed park tourism industry, one not fulfilling its potential.

Many governments see nature-based tourism as an important tool for economic development. Unfortunately, most have not invested sufficiently in staff training, infrastructure or park resources 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 nature-based 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. Looking at the Canadian situation can show this situation. 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. The Canadian Tourism Commission 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 collection and distribution of information on nature-based or park-based tourism. Neither the volumes of park visitation nor its economic impacts are systematically collected and made available for government and private consumption. Therefore, the importance of nature tourism in the country is severely underrated due to lack of adequate information. The parks do not compare well to other economic generators, such as auto 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 few regional or national studies of the economic impact of the tourism associated with parks and reserves.

Eagles, McLean & Stabler (2000) compiled a national park-use database for Canada and the United States. They found that in 1996, the last year complete data were available, 2,506,451,728 visitor days of recreation occurred in the federal and state parks and protected areas of the USA, and an additional 115,325,509 visitor days of recreation occurred in Canadian federal and provincial protected areas. This massive volume of 2,621,777,237 visitor days, previously undocumented, reveals a high level of tourism use 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 Can.$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 other non-staffed, 166 provincial parks, the six national parks and the hundreds of conservation areas were added to the calculations.

Recent research documented the expenditure level of park users to Ontario's Algonquin Provincial Park (Bowman, 2001). This is Ontario's oldest and most visited Provincial Park. Table 3 shows that the expenditures per person per day varied dramatically, with day visitors spending the most, at $208.00 and car campers the least, at $27.7. This research showed that the 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.

Table 3: Algonquin Provincial Park Visitor Expenditures			
User Type	**Expenditure**	**Percent of Total**	**Exp. 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	$.7 million	4%	$4,809 per year
Bus Trippers	Unknown	Unknown	Unknown
Children's Camps	Unknown	Unknown	Unknown

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 Friends of Algonquin organizational spending was estimated as Can $4.9 million in labour income, $6.0 million to the Gross Domestic Product and 150 full-time person-years of employment. The provincial economic impact generated by visitor spending was estimated as $8,1 million in labour income, $11.9 million to the Gross Domestic Product and 301 full-time person-years of employment. Therefore, the provincial economic impact generated by park expenditures, Friends expenditures and expenditures by five visitor groups (day users, car campers, interior campers, lodge visitors, and cottage leaseholders) was $13 million in labour, $17.9 in GDP and 451 in person years of employment. This is a conservative estimate.

Parks Ontario typically uses the Ministry of Natural Resources Social and Economic Impact model for estimates of economic impact of the provincial parks (D. Mulrooney, personal communication, September 17, 1997). Information from this model is used for budget planning, local political promotion and sales of park products. However, this effort is modest in scope and not widely applied.

The most recent economic benefits study for a park system undertaken in Canada was done for British Columbia (Coopers & Lybrand, 1995). The study concluded that the BC

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 (4,200), metal mining (3,800) and coal mining (3,000). In 1993 the BC provincial parks' system contributed about Can.$430,000,000 to the provincial gross domestic product. The park visitors reported significant benefits from recreational activities beyond the market transactions. These nonmarket benefits were estimated at Can.$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 national parks' contribution was added to the BC provincial parks' contribution, then the benefits would be considerably enhanced.

The Province of Alberta undertook an economic impact calculation of tourism in its provincial parks, following on the lead of British Columbia. The results showed an economic impact that was large and similar to the economic impact of forestry in the province. The report was never officially released. It is speculated that the significance of the information to decision making resulted in a successful lobby 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 with the report's dissemination. This is a common problem for park managers, interagency conflict that results in a suppression of data and resources with the goal of now allowing park tourism to gain the full public policy profile that it would otherwise enjoy. This is especially an issue when park management is within a broadly-defined resource management agency. This is least of an issue 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 Can.$1,250,000,000 per year. Around 30,000 person-years of employment occur due to this spending. Non-resident visitors contribute 25% of the visitor spending, or $275,000,000 annually (Parks Canada, 1995). Coopers & Lybrand Consulting (1995) calculated that in 1993 British Columbia provincial parks produced total benefits of Can.$430,000,000. These benefits 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 Can.$19. In 1992 the total economic output due to Ontario parks was Can.$831,200,000 (OMNR and Econometric Research, 1993). This amount

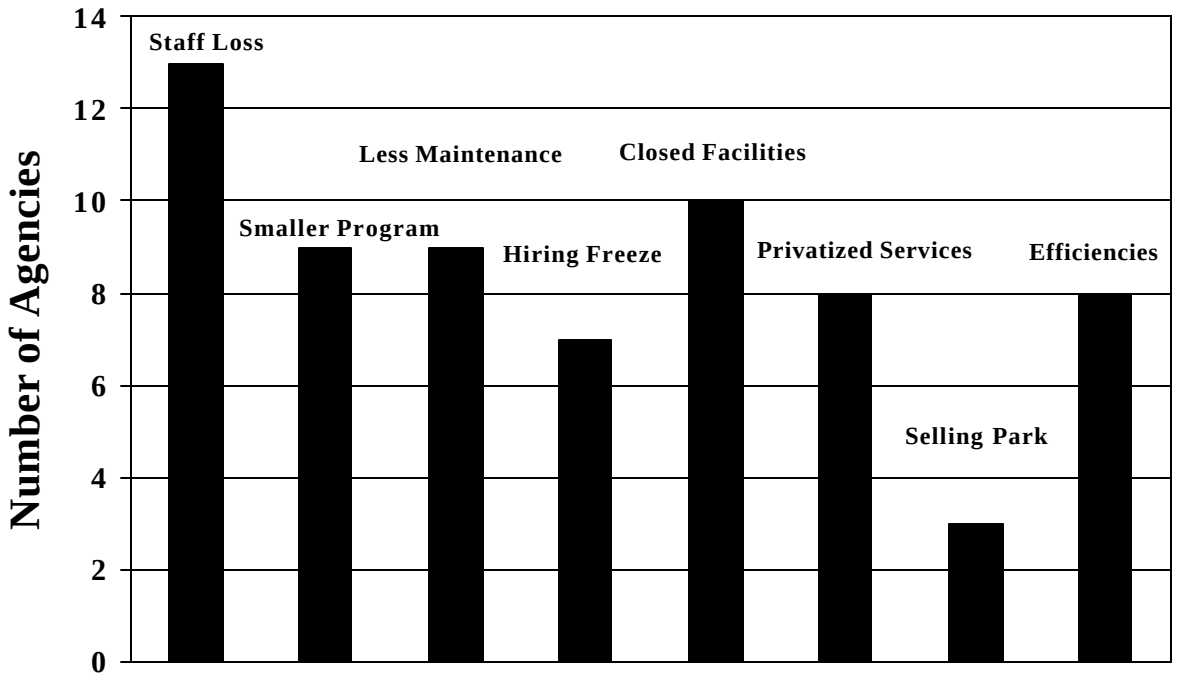
included direct, indirect, and induced impacts of parks. In 1992 Ontario provincial parks had 7,000,000 visitor days of recreation activity. Therefore, each day of recreation produced an economic benefit of Can.$119. The difference in calculated impact per person between B. C. and Ontario comes from different approaches to the calculation of impact. 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 Can.$2.2 and $14 billion. However, 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 one has been developed for the application 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, as calculated by Eagles, McLean and Stabler (2000), represent visitor days of activity and one accepts an impact range of US $90 (OMNR and Econometric Research, 1993) to US $141 per day (Carlsen, 1997), 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 estimations 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.

Impressive as these figures are, they have not convinced American and Canadian governments to maintain the tax-based grant levels upon which most of the park systems depend. Figure 5 shows the impacts of massive budget cuts on the 13 national, territorial, and provincial park systems in Canada over recent years (Van Sickle and Eagles, 1998). All systems lost staff numbers. 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 mechanised 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.

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

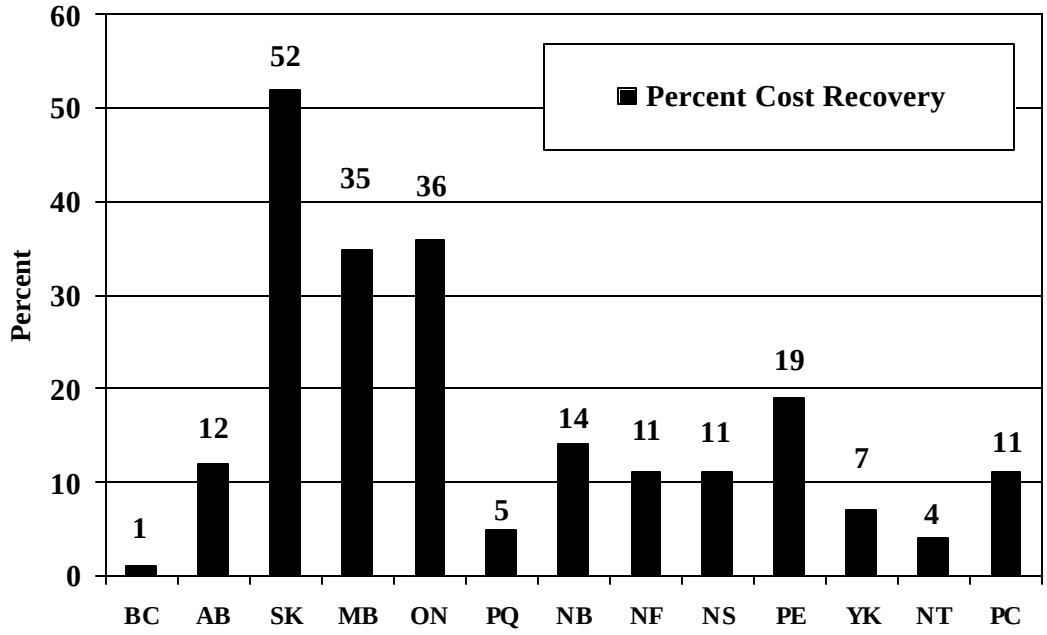
Figure 5: Impacts of Budget Cuts in Canadian Parks



Wilderness). The five areas studied experienced tourism expenditures in 1991/92 of Aus. $1,372,000,000. The total management budgets were Aus. $48,700,000, and the user fee income to the management agencies was Aus. $4,160,000. Therefore, the management budgets were only 3.5% of the tourist expenditure that occurred in the World Heritage Areas. The revenue raised by government 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.

In Canada there are several financial structures within the federal and provincial park agencies. Some are government agencies. Others function like crown corporations. Figure 6 shows the range in cost recovery for the 13 senior government park agencies in Canada. The

Figure 6: Cost Recovery of Canadian Park Agencies



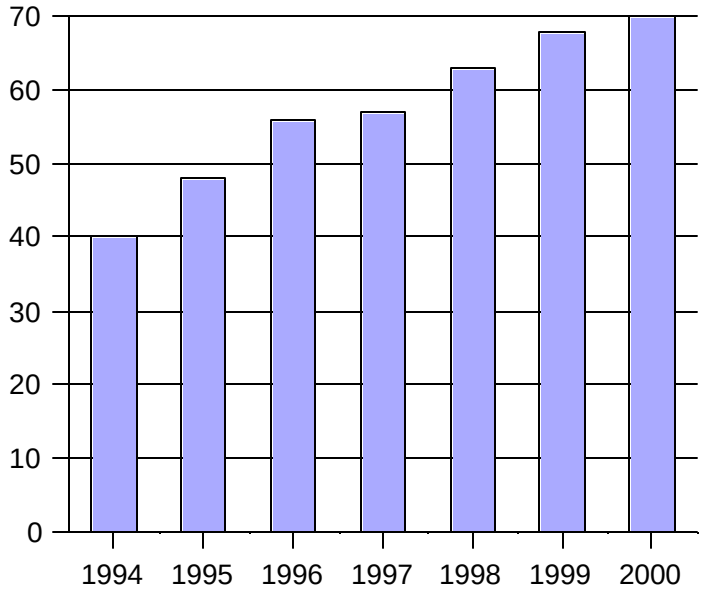
recovery of management costs from tourist charges varies from only 1% in British Columbia, to slightly more than 50% in Saskatchewan This variation is largely due to government policy dictating the financial structure of the agencies, not to the volume of tourism nor to the amount of area being managed (Van Sickle and Eagles, 1998). Those with the lowest level of cost recover had very weak tourism expertise within the park agencies, with the result that most tourism 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 in three parks in India, Indonesia and Zimbabwe that the income from tourism was between 7% to 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 provide the management structure necessary to implement the new business approach, Parks Canada (1995) obtained government permission (a) to retain and reinvest all revenues, (b) to plan and operate on a multi-year, non-lapsing basis, (c) to increase non-tax revenues from products and services, (d) to borrow against future revenue, (e) to link revenues to costs, and (f) to 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 this plan, new national parks' legislation was passed by the Canadian Parliament in 1998.

By fiscal year 2000/2001 Parks Canada had gross revenues of Can $84.7 million, a 111% increase since 1994/1995 (Figure 7). Three sources of income were prominent revenue sources: entry fees with $30.1 million, rentals and concessions with $14.3 million and camping fees with $10.9 million. These figures reveal that increased emphasis on revenue generation, associated with a more business-like management structure resulted in significant revenue gains.

Figure 7: Parks Canada Income



The Australian, American, Canadian, Ontario, and British Columbia studies show the significance of parks to economic life in those areas. However, generally there is a lack of national and provincial economic data on parks. This is a major inhibitor in public policy making across the world and in Canada. 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

Typically, in most countries park pricing policy 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 modest and not subject to market forces. Recreation allocation is typically done by the first-come first-serve approach. In some parks fees are also charged by the park agency for specialized recreation services, equipment rental, accommodation, food services and souvenir sales.

Typically the income from tourism is well below the park budget, constituting a small percentage of the money used for management (Figure 6). Van Sickle and Eagles (1998) found in Canadian national and provincial park agencies that fees provided an overall average of 17% of the budgets, a very similar amount to the 18% found by Brademas and Readnor (1987) for the USA. Saskatchewan is the national leader in Canada, earning 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. Recent figures from state parks in the USA show that for 1998 33.8% of state park budgets were recovered from various types of tourism fees (McLean, 1999). These figures from the USA suggest that in this country state parks are successfully earning higher percentages of their budgets from tourism fees. Globally, there is a trend of governments requiring parks to recover higher percentages of their budgets from tourist expenditures.

Often the generation of small amounts of revenue provides little incentive for the central 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 a central government body setting an annual budget, dependent upon the money available for the central treasury as well as various political and lobby group machinations. Goodwin et al. (1995a) found in studies of parks in India, Indonesia and Zimbabwe there was no direct relationship between park budgets and park tourism revenues. In these three countries the money was collected locally, then submitted to central government.

In countries without a large tax-based subsidy for park management, tourism is often the largest source of income for park agencies. Throughout Africa, for example, the parks must earn much or most of their operating budgets from tourism. This has led to a level of innovation in

pricing policy that is worthy of note.

South Africa has a booming tourism industry that has expanded dramatically in the past five years and is predicted to grow substantially in the next five years. Significantly, 60% of the 5.5 million tourists who visited the country in 1997 visited a national park or game reserve (Eagles, 1999). The democratically elected government of South Africa has many social objectives calling for budget allocation. As a result all tax-based grants to the national and provincial park systems are being phased out, leaving the parks with the options of increasing income from tourism or cutting staff and services. The parks are responding with impressive pricing and tourism service innovation.

The South African National Parks (SANP) system is now at 80% budget recovery from tourism (Msimang, personal communication, May 21, 1999). SANP now operates an impressive array of tourism businesses in the national parks. It provides a range of accommodation, ranging from campgrounds through family cabins to hotels. All of 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 4 by 4 vehicle companies, holds promise. This diverse set of income generators must be further utilized if the SANP is to gain sufficient income to reach the public policy goal of financial self-sufficiency.

Differential fees are becoming more common. Foreigners pay more, and sometimes much more, than nationals do. At high demand times prices are sometimes higher. Prices are becoming associated with service level, higher prices corresponding to more services. Those agencies that have parastatal status and have private sector involvement have a much higher diversity of pricing and servicing standards.

South Africa is 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, RV 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 through cottages to hotels. Many parks provide several levels of food provision, from restaurants, through fast

food outlets to grocery stores. Merchandise sales are common, typically for typical outdoor gear and souvenirs.

In South Africa the private sector is heavily involved in the upper range market, providing two or three levels of 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 already identified ecotourism profile of the location.

Table 4 summarizes the full range of income generation opportunities in park tourism now being utilized by park agencies and their private sector partners in various locales. A few park agencies are experimenting with the licensing of intellectual property. The names and images of national parks are some of the most well-known and powerful in the world. 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 4: 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

Table 5 shows the revenue sources for Parks Canada for the 2000/2001 fiscal year (Parks Canada, 2001). This reveals that this agency relies heavily on three sources of income, entry fees, rental and concessions and camping fees. It also reveals that the agency is not taking advantage of the majority of income sources shown in Table 4. For example, lucrative income sources such as food and merchandise sales were not utilized directly. However, some such income would be earned indirectly through concessionaire fees.

Table 5: Parks Canada Revenue Sources for 2000/2001

Revenue Source	**Revenue 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

Australia is a typical example 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 free public access to natural and cultural heritage assets, so much so that when the Great Barrier Reef National Marine Park proposed an increase from $1 to $6 for park visitors using commercial tourist operators a Senate parliamentary committee inquiry was launched (Allison, 1998). This inquiry came to the apparently self-evident conclusion that: "It must be accepted that user charges can usually raise no more than a small percentage of total costs." (Allison, 1998, p.133). This inquiry apparently did not recognize, which is commonly the case, that there are many sources of income that can be obtained from various tourism sources.

In several countries dramatic increases in park use fees were introduced without proper client consultation, most specifically Costa Rica and Zimbabwe, resulting in vociferous objection

and subsequent roll-back of some of the increase. The lack of knowledge of pricing policy and the methods of price adjustment is common in parks, and is visibly evident in these two examples.

There are implications for management of higher levels of income based on tourism (Table 6). Overall, park visitors will face higher fees and more increased opportunity where fees are charged. The biggest changes take place within the park agency. A business approach to management is necessary. This includes the ability to retain and utilize most if not all income. Given the need for income, the park visitors become more important. Their opinions on programs, their length of stay, their return rates, their facility and program needs and their overall satisfaction become important management variables. The managers become more aware of the need for marketing, that is the creation of a product that fits the market needs. Once the income becomes substantial park management has a higher level of independence from government grants, and from government in general.

Table 6: Implications of Tourism-based 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

Experience reveals many resistance factors from the move from a park agency dependent upon government grants, to an agency dependent upon tourism income (Table 7). Nature is perceived as being universally-owned and requiring no human management. This concept of nature as a free good creates expectations that national parks and other forms of protected areas should provide free access. Over history this concept was reinforced with pricing for access well below the production cost. In the USA national park use fees were prohibited by law for many

years. The private sector in tourism usually objects to any fees, and especially to any increase in fees. 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 therefore act like vultures, swooping into the political arena to seize the most important assets, such as accommodation and food provision. This denies the park management from important income sources. Park agencies are typically not equipped to undertake business management. Their marketing, pricing policy, economics and financial expertise are usually deficient. This and other factors lead many park agency staff to vigorously object to a park agency operating as 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 commercialisation. It can also be due to resistance to paying increased fees.

Table 7: Resistance Factors to Tourism-based Income
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

Tourism Planning and Management Competencies

All national parks and protected areas have some level of visitor use. This can vary from just a few 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 usually 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 this, or to not participate. Visitors are expected to make their opinions about activities and services known through management reviews or through complaints, or not at all. It is very rare for park agencies to consistently and professionally evaluate and monitor the wants and levels of satisfaction of their visitors. It is even rarer for evaluation to be done on potential visitors or past visitors who did not return.

The majority of park agencies are weak in tourism competencies. Those that do occur are usually the result of resource managers learning on the job about visitors and tourism management. Very few agencies, and almost no parks, have professional expertise in leisure pricing policy, in tourism economics, in marketing, in tourism management, in social statistics, in service quality or in leisure studies. However, this situation is changing rapidly in several countries. For example, Parks Canada is one of the leaders in the development of high levels of competency throughout the agency in tourism management. This increase is stimulated by the need of the agency to gain operational income from tourism.

The low level of tourism competency occurs in park agencies where the emphasis is on resource protection and the budget comes entirely from a central government pot. However, whenever a park agency starts to move 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 the parks have much higher levels of tourism market expertise than do the parks. In many parts of the world the private sector is the force behind the 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 is in Costa Rica, where the national parks and the wildlife refuges have low tourism competencies within the government agency. It is the private sector that has developed the internationally recognized, park-based ecotourism industry over the last 20 years.

Park Tourism Market

Is there a market for increased levels of nature-based tourism? The largest market study ever undertaken 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 United States. In the seven metropolitan areas studied, Seattle, San Francisco, Los Angeles, Dallas, Chicago, Toronto, and Winnipeg a market of 13.2 million potential ecotravellers 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. Midrange accommodation was desired, and the experienced ecotourist placed much higher emphasis on the outdoor experience than on the accommodation. Competent guides and quality interpretive programs enhanced the quality of the travel product experience. The preferred trip was long, at seven days or more. Parks and the activities in the parks were found to be very important components of the ecotravel 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.

Visitation Statistics

Decisions should be based upon data. The better the data, the better the chance of good decisions. A fundamental figure for decision making is that of product volume. No private company can survive without thorough, accurate and up-to-date data on the numbers and timing of the production and subsequent sale of their products. However, some parks pay low levels of attention to documenting their level of recreation use. In recent years during budget cutting some managers cut gate staff and visitor management personnel, people doing functions seen as less important. Imagine a store firing all its cashiers and its product service personnel!

Many parks are poorly designed for documentation of visitation levels. Parks are often large with many entry points, making it difficult to tabulate all entrances. Some park clients sneak in, to avoid fees. Many parks do not have staff covering all entrances at all times of the day and all months of the year. Shoulder season visitation is usually poorly documented. Within

one agency there may be different data collection procedures in different parks. And in large parks there may be different data collection procedures at different entrances (Wade, 1998). However, the recent move in Canada and the USA towards parks retaining fee income is reversing this trend and placing much higher emphasis on catching as many of the clients as possible.

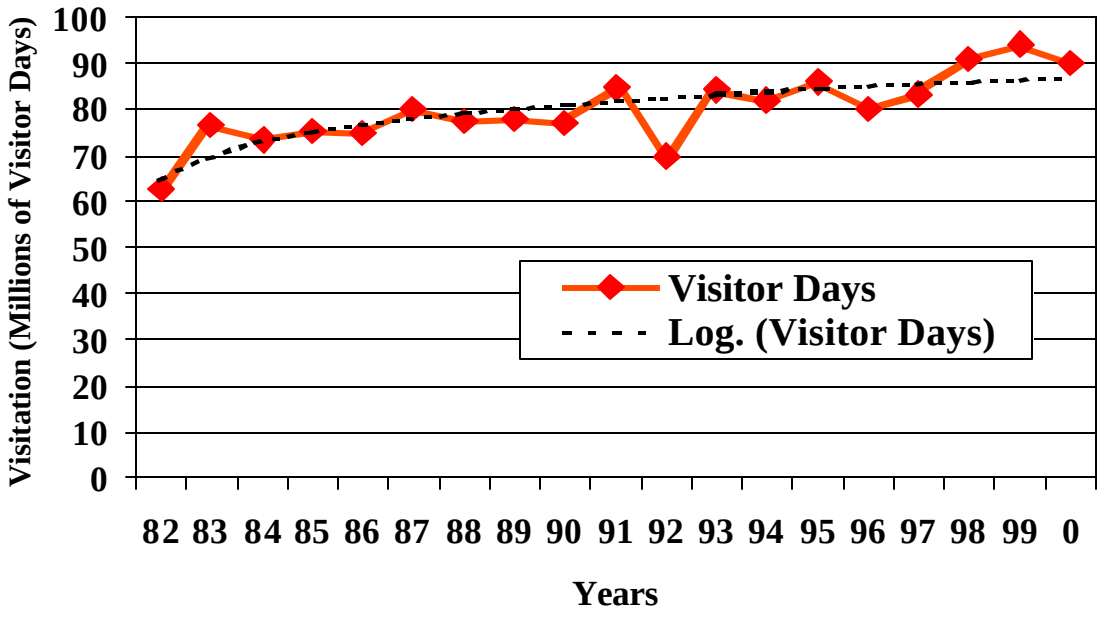
Ontario has a history of collecting accurate and useful park use figures, and can be used as an example to illustrate certain points. Figure 9 shows the visitation trends in Ontario provincial parks over the last decade, as measured in visitor days of recreation use. Clearly, increases in use continue across the period, shown both in the raw data and in the trend line shown in Figure 9. It is probable that budget cuts in Ontario throughout the 1990s meant that the figures shown in the last few years are underestimated, as staff are less available to count properly in shoulder seasons and in low-use periods during the days of the heaviest seasons. The dip from 1995 to 1996 is probably due to a large reduction in staff, due to budget cuts. Interestingly the use level increases substantially in the late 1990's, even though the fees levels increased substantially during the same period. One major reason for the increase is the fees charged were used to provide higher levels of service, especially for camping.

Every park system has its own, unique system of counting and recording its visitors. Some count all who enter, including recreationists, service vehicles, and vehicles just passing through. Some count only those who stay during the night, ignoring day visitors. Some count only those who pay. Some record the numbers of entrants, some the numbers of visitor hours, and others the numbers of visitor days.

There is a need to standardize, in parks, in countries, and globally, the definition, the collection procedures, and the reporting of park tourism statistics. When this is done, the park movement will have new and powerful data for influencing public policy discussions.

Recently the World Commission on Protected Areas released the first-ever guidelines for

Figure 9: Visitor Use Trend in Ontario Provincial Parks



the measurement of public use of parks and protected areas (Hornback & Eagles, 1999). This manual provides standardized terminology for park tourism, outlines a five-level system of sophistication for measurement, provides guidance on measurement techniques and technologies, and provides examples of the use of tourism data in park management. The guidelines are intended to assist in the standardization of park tourism measurement. In 2001 a global tabulation of park tourism use levels will be undertaken as part of the preparation of the next edition of the United Nations list of national parks and protected areas. The goal is to have the global park-use data available for the next World Parks Congress that is to be held in South Africa in September 2003.

Tourism Management Structures

Typically parks are managed by government agencies. In this situation most staff are government employees with 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 accommodation, tours and consumer products, are provided by concessionaires who are licensed by the agency for a period of time. This model

is widespread and reasonably effective when central government provides sufficient budget. However, it is very ineffective in several respects. The budgets 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. This model can be problematic when the size and power of the private sector tourism overwhelms a politically weak government agency. In this situation the selfish individual interests of the tourism operators can lead to tourism overuse. Very severe environmental degradation often occurs with this model, due to the lack of budget for the agency to handle tourism pressures.

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

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 Minister. This approach is in place in Kenya, in Tanzania, in South Africa and in Ontario, Canada, to name four examples. Advantages over the government model are numerous. This structure is much more financially efficient. The agency can 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 outflow and inflow of money. This structure usually leads to much higher levels of emphasis on park visitors, their needs and their satisfaction. This approach often has a much flatter structure, with the multiple layers of the government agency replaced by only a couple of administrative layers. The biggest disadvantage of a parastatal, seen by some, is the loss of central control by government.

Those countries with parastatal forms of park agency management are those that are most likely to earn the majority or their entire operational budget from tourism. Examples include

Tanzania National Parks (TANAPA) in Tanzania, Kenya Wildlife Service (KWS) in Kenya, 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.

Some countries utilize non-profit corporations to provide some of the tourism services. These can take the form of membership groups that provide specialized services, such as guiding, information dispersal, and recreation management. Such groups have the advantages of a parastatal plus the additional ability to mobilize large numbers of volunteers and solicit donations. However, this approach is rarely 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.

Often for-profit private corporations provide some tourism products and services to visitors in parks. This is frequently done on a licensed concessionaire basis, where the company has a monopoly, or on a free market basis where many companies compete for the tourist market. Occasionally experimentation is occurring where park development or park management is being turned over totally to 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 Lesotho 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 has 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 the operational parks to the fledgling national parks' agency of the country. This is the only example I have ever seen of a private company 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.

Conclusions and Summary

What does it take to effectively manage 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 park management authorities have some level of familiarity with park visitation. Most are capable of handling some international tourism. If the parks work within a competent, co-ordinated system, and have sufficient finances to operate the parks that exist, it is possible to develop a co-ordinated tourism management system.

For the parks to become international destinations, the country and the parks must have a global image of being a premier destination for outdoor recreation and nature tourism. Potential tourists must see some international profile. Location is important, but poor location can be overcome due to inexpensive air travel. Significant natural resources, a high market profile, and a 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, most 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 usually provide more information than do the parks. 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 the 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 lag far behind the private sector in applying service quality management principles, and this lack is obvious to their clients.

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 National Parks Service of the USA developed a suite of national cooperative research and training institutes at first-line universities in that country (Michael Soukup, personal communication, November 24, 1997). This follows similar initiatives previously undertaken by the US Forest Service, and another by the US Fish and Wildlife Service. Recently, the park agency in the State of Victoria in Australia funded a major cooperative research and education unit in at Deakin University (David Weston, personal communication, November 17, 1997; John Senior, personal communication, July 24, 1999). The recent nature tourism strategy for the State of New South Wales proposes a strengthened link between the national park agency and universities in that state of Australia (Worboys, 1997). No such cooperative units are found in most countries in the world. This deficiency results in a severe paucity of professional level of expertise in the specialized area of park tourism. There is an urgent need for the development of better connections between universities and park management. Australia is leading the way with the development of the national research program for sustainable tourism. This is known as the Cooperative Research Centre for Sustainable Tourism (CRC Tourism) and is located in the Gold Coast Campus of Griffith University (Terry de Lacy, personal communication, July 12, 1999). This operation involves university, government department and private sector cooperation into cutting edge and applied tourism research. This approach appears to be functioning very well with impressive levels of useful tourism research being published.

Many parks are generally unknown outside the local area, and have weak mechanisms to provide a higher level of 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. Within an overall park system tourism strategy, only those with appropriate natural and managerial resources should be chosen for 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. The plethora of park names, such as "provincial park" and "conservation area," leads to confusion by many potential visitors. These names are often poorly known outside the local area. These phrases 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 route? 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.

Many park administrations show weak understanding of the global ecotourism market. There does not appear to be a policy envelope, an administrative structure, or a staffing complement that recognizes an international role. The big exception to this situation is in Australia, with both national and state-level ecotourism strategies that explicitly deal with the parks as international destinations (Allcock, Jones, Lane & Grant, 1994; Worboys, 1997; Western Australian Tourism Commission, 1997; Tourism Queensland, 1999). The ecotourism policy and plan for the State of Queensland in Australia is one of the most mature policy documents available.

An obvious example of the lack of understanding of 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 international visitors. Multilingual

publications are almost non-existent. Staff language ability is generally in the local language, often in English, and almost never in other important languages such as German, Spanish, or Japanese. Prebooking by international visitors is very difficult or non-existent. There is no way for international tourists to work through their travel agents to facilitate visitation to most parks. Often 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 the parks, but its availability is spotty, and when available, is difficult to access for international visitors. There is seldom easy access to guides, specialized information, or ethnic food for international travellers. Co-operation with airlines, tour agencies, recreation vehicle rental companies, or hotel chains is rare. Parks do little to encourage, or even facilitate, the visitation by people from the country's major foreign tourism markets. Given 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.

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 camping 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 scale and difficult to access by people in remote locales of the world.

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, to develop the research base, to develop the product line, to advertise the product, and to handle the visitors when they arrive. The parastatal agency structures developing in many countries help self-finance this endeavour when they become operational, but there are often insufficient start-up funds. It is important for governments to recognize that one must spend money to make money. Allocations from governments are necessary for the development of nature-based tourism. These allocations must be made within the context of a carefully constructed national, provincial, and agency policy environment. This aid is often occurring in developing countries 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 partially due to a nature-tourism policy void in many countries. There is an urgent need for co-ordinated national/provincial/regional nature-based tourism strategies in most countries. These strategies would identify key policy priorities, consider which sites have potential for international ecotourism, develop recommendations for market development, provide backing to financial development, and schedule a multi-year development plan. The Australian national and state nature-tourism policies are the best in the world at the current time (Allcock, Jones, Lane & Grant, 1994; Worboys, 1997, Western Australian Tourism Commission, 1997).

Park Tourism Summary and 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 and economic data is required. Carlson (1997) discussed the complexities of evaluating and monitoring recreation and tourism use. After 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 is attempting to standardize the collection and use of park tourism data. Guidelines for the measurement of economic impact of parks are under development (Bagri, Blochhus, & Vorhies, 1998). The goal of this effort is to standardize methods of measurement and to encourage the widespread collection and dissemination of the output. Guidelines for the collection and use of visitor-use data (Hornback & Eagles, 1999) are published by the World

Commission on Protected Areas. The goals of these two efforts are to standardize the approaches used for economic impact measurement, as well as the terminology, the measurement methods, and the reporting of park visitation. These guidelines should be of assistance to all parks agencies.

The next data collection for the United Nations' List of National Parks and Protected Areas, occurring in the year 2001, asks for visitor-use data from all countries. Once compiled, this inventory will provide the first global documentation of park use. Using economic models, these visitor-use data will be the base for the calculation of global tourism economic impacts.

With the movement toward documentation of tourism's volume and impact, discussion is starting on the evaluation of the park management's ability to handle tourism (Hocking, 1997). 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.

Many parks are starting to move towards 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 non-profit 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 special purpose merchandise, are under way.

Park agencies must develop tourism management competencies within their own organization (Table 8). It is critical that the park visitors' needs and wants be understood. Most park agencies now function on a take-it or leave-it philosophy towards their

Table 8: Tourism Competencies

1) Understanding the visitors' needs and wants
2) Service quality management
3) Leisure pricing policy
4) Leisure Marketing
5) Tourism and resource economics
6) Finance
7) Tourism management

visitors. Certain types of facilities and services are provided, and the park client is not even asked if this facility or service is desirable or serving their needs. A class example to illustrate this point 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 service quality goal management. 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 developing means to match the two. The park agencies with parastatal forms of management are now staffing with specialized expertise in leisure marketing. This paper makes a strong point of the need for tourism and resource economics expertise within a park agency. Those agencies that function like a corporation need specialized finance expertise. Tourism management is a large and specialized field that is a 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 8. 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 absolute numbers of visitors, and more influenced by weak tourism policy, management and staffing. Very low levels of finance often cause this. It has been shown many times in many parks that 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 it's allowed to by the overall government legislative and policy framework.

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.

Acknowledgements

Thanks to Tom Beechey of Ontario Parks for the initial encouragement to develop these ideas into a paper. Thanks to Dan Mulrooney of Ontario Parks and Per Nilsen of Parks Canada for many discussions and debates on the intricacies of visitor management. Michael Green of the World Conservation Monitoring Centre in Cambridge, U K, kindly allowed for the reproduction of Figure 3 from his unpublished paper. Special thanks to Robin Grimwade of Centennial Park Trust of Sydney, Australia for insightful discussions on the park management bench marking effort under way in Australia. Michael Soukup, Associate Director for Natural Resources of the National Parks Service of the USA provided information on agency-university agreements. Bryan Higgins of the City University of New York, Megan Epler Wood of The Ecotourism Society, Kreg Lindberg of Sturt University, Peter Valentine of James Cook University, Steve McCool of the University of Montana, Steve Parker of the University of Nevada at Las Vegas, Chris Haynes of the Conservation and Land Management Department of Western Australia, David Weston the Deputy Director of National Parks for the State of Victoria, Mavuso Msimang of the South African Parks Board, Trevor Sandwith of Kwa-Zulu Natal Nature Conservation Service, Dave Reynolds of Earth Plan, and Keith Johnson of the Department of Conservation of New Zealand each provided important insights. Ron Welch and Derek Wade of the University of Waterloo, Dan Mulrooney, Tom Beechey and Barton Fielder of Ontario Parks, and Ric Symmes provided comments on an earlier version of the paper. Ann Ross made editorial comments. Terry de Lacy, the executive director of Australia's national sustainable research centre (CRC Tourism) was very helpful. John Senior of Parks Victoria and Tony Charters of Queensland Tourism provided valuable information on recent tourism management trends within their parts of Australia.

References

Allcock, A., Jones, B., Lane S., & Grant J. (1994). National Ecotourism Strategy. Canberra, ACT: Commonwealth Department of Tourism.

Allison, Lyn. (1998). Access to Heritage: User charges in museums, art galleries and national parks. Report of the Senate Environment, Recreation, Communications & the Arts References Committee, Parliament of the Commonwealth of Australia. Australia: Canberra.

Baez, A. L. (2001) Costa Rica Como Destino Turistico. Unpublished Conference Paper, Rio De Janeiro, Brazil.

Bagri, A., Blochhus, J., & Vorhies, F. (1998). Economic Values of Protected Areas: A Guide for Policy Makers and Park Managers. Draft 2. Gland, Switzerland: World Commission on Protected Areas, IUCN - The World Conservation Union.

Bowman, Margaret. (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. 300 pp.

Brademas, D. J. and Readnor, J. K. (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 M. Epler-Wood and K. Lindberg (Eds.), Ecotourism: A Guide for Planners and Managers, Volume 2 (pp. 7-10). North Bennington, VT: The Ecotourism Society.

Coopers & Lybrand Consulting. (1995). Economic Benefits of British Columbia Parks. Victoria, BC: British Columbia 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., & Common, M. (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 S. F. McCool & A. E. Watson (Eds.), Linking tourism, the environment and sustainability. (pp 25-33, USDA Forest Service, General Technical Report INT-GTR-323). Ogden, UT: Intermountain Research Station.

Eagles, P. F. J. (1995b). Tourism and Canadian Parks: Fiscal Relationships. Managing Leisure, 1(1),16-27.

Eagles, P. F. J. (1998). International Ecotourism Management: Using Australia and Africa as Case Studies. Paper presented at Protected Areas in the 21st Century: From Islands to Networks, World Commission on Protected Areas, Albany, WA, Australia.

Eagles, P. F. J. (1999) Maloti-Drakensberg Transfrontier Conservation and Development Area Project Mission Report on Tourism to the World Bank. Unpublished report.

Eagles, P. F. J., & Higgins, B. R. (1998). Ecotourism Market and Industry Structure. In M. Epler-Wood and K. Lindberg (Eds.), Ecotourism: A Guide for Planners and Managers, Volume 2 (pp. 11-43). North Bennington, VT: The Ecotourism Society.

Eagles, P. F. J., McLean, D., & Stabler, M. J. (2000). Estimating the Tourism Volume and Value in Parks and Protected Areas in Canada and the USA. *George Wright Forum* 17(3): 62-76.

Eagles, P. F. J., & Wind, E. (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, ON: Tourism Canada.

Filion, F., Foley, J. P., & Jaquemot, A. J. (1994). The Economics of Global Ecotourism. In M. Munasinghe & J. McNeely (Eds.), Protected Areas Economics and Policy: Linking Conservation and Sustainable Development. (pp. 235-252). Washington, DC: World Bank.

Global Environment Facility. (1996). Operational Strategy. Washington, DC, USA.

Goodwin, H. J., Kent, I. J., Parker, K., & Walpole, M. J. (1997a) Tourism, Conservation & Sustainable Development: Volume I, Comparative Report.(1 of 4 Volumes), published, The Durrell Institute of Conservation and Ecology, The University of Kent, Canterbury, UK.

Goodwin, H. J., Kent, I. J., Parker, K., & Walpole, M. J. (1997b) Tourism, Conservation & Sustainable Development: Volume IV, The South-East Lowveld, Zimbabwe.(1 of 4 Volumes), Unpublished, The Durrell Institute of Conservation and Ecology, The University of Kent, Canterbury, UK.

Green, M. J. B., & Paine, J. (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, World Commission on Protected Areas, Albany, WA, Australia.

HLA Consultants & ARA Consulting Group Inc. (1995). Ecotourism/Nature/Adventure/ Culture: Alberta and British Columbia Market Demand Assessment. Vancouver, BC, Department of Canadian Heritage.

Hockings, M. (1997). Evaluating Management Effectiveness. Draft 1. Gland, Switzerland: World Commission on Protected Areas, Working Group on Management Effectiveness.

Hornback, K., & Eagles, P. F. J. (1999). Guidelines for Public Use Measurement and Reporting at Parks and Protected Areas. First Edition. Gland, Switzerland: World Commission on Protected Areas, Task Force on Tourism and Protected Areas.

IUCN. (1994). United Nations List of National Parks and Protected Areas. Gland, Switzerland: Commission on National Parks and Protected Areas.

Kellert, S. R. (1979). Public Attitudes Toward Critical Wildlife Issues. Washington, DC: US Government Printing Office.

Laarman, J., & Gregersen, H. (1994). Pricing Policy in Nature-based Tourism. Working Paper, EPAT/MUCIA, St. Paul, MN: The University of Minnesota

Lindberg, K. (1998). Economic Aspects of Ecotourism. In M. Epler-Wood and K. Lindberg (Eds.), Ecotourism: A Guide for Planners and Managers, Volume 2 (pp. 87-117). North Bennington, VT: The Ecotourism Society.

McLean, D. (1999). The 1999 Annual Information Exchange. The National Association of State Park Directors and the Eppley Institute, The University of Indiana, Indiana, USA. 55 pp.

National Parks Service. (1995). The Money Generation Model. Denver, CO: Office of Social Science, Socio-economic Studies Division.

Ontario Ministry of Natural Resources & Economic Research Ltd. (1993). Economic Impact of Provincial Parks in Ontario: A Summary Report. Peterborough, ON: Provincial Park Operations Section.

Parks Canada. (1995). Framework - National Business Plan 1995/1996 - 1999/2000. Hull, PQ: 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: Queensland National Parks and Wildlife Service.

Stanley, R., L. Perron, and S. Smeltzer. 1999. The Provincial Economic Impact Model. The Department of Canadian Heritage, Ottawa, Ontario, Canada. + computer program.

The World Bank. (1998). South Africa Cape Peninsula Biodiversity Conservation Project. Project Document, Environment Group, Africa Region. Washington, DC.

Tourism Queensland. (1999) Queensland Ecotourism Plan. Tourism Queensland, Brisbane, Australia

Tye, H., & Gordon, D. M. (1995). Financial and Human Investments in Biosphere Reserve Management. Cambridge, UK: World Conservation Monitoring Centre.

Van Sickle, K., & Eagles, P. F. J. (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. Unpublished master's thesis, University of Waterloo, Waterloo, Ontario, Canada.

Wells, M. P. (1997). Economic Perspectives on Nature Tourism, Conservation and Development. Environment Department Paper No. 55, Pollution and Environmental Economics Division. Washington, DC, The World Bank.

Western Australian Tourism Commission. (1997). Nature Based Tourism Strategy For Western Australia. Department of Conservation and Land Management, Perth, Australia.

Worboys, G. L. (1997). Draft Nature Tourism and Recreation Strategy. Hurstville, NSW: New South Wales National Parks and Wildlife Service.