

Trends in Park Tourism: Economics, Finance and Management

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This paper discusses issues in tourism to protected areas/parks. Emphasis is given to the relationships between the globally growing numbers of parks, the rise in tourism to those parks and its economic impacts, and finance and management policies used within the parks. In-depth consideration is given to park pricing policies, park tourism competencies, the need for better visitation/visitor statistics, and new tourism management structures. The development of parastatal management structures with greater links between tourism competencies and conservation management techniques is seen to be central to the creation of both successful parks and sustainable tourism within those parks.

Introduction

Nature-based tourism is a large and growing global industry, partially dependent upon the attributes of the natural environment and especially that occurring in parks and protected areas. It is heavily dependent upon two fundamental components: (1) appropriate levels of environment quality, and (2) suitable levels of consumer service.

Several countries have nature-based tourism as a key component of their most important export industry, tourism. The economic importance of the tourism industries in these countries is leading to more thoughtful policy and institutional development. Australia, Tanzania and New Zealand are examples especially worthy of note.

The national ecotourism strategy for Australia succinctly summarises the background to the aggressive and successful policy development in that country. Ecotourism is shown to offer 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). To ensure the success of the national policy, the Australian government committed A\$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 Queensland (Tourism Queensland, 1999). Increasing foreign visitation to Australia throughout the 1990s and the associated impacts on parks and protected areas led to increased emphasis on tourism management in protected areas (Worboys, 1997; Worboys *et al.*, 2001).

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). This effort resulted in slow but continuous growth of foreign tourism in Tanzania and in increases in park visitation throughout the 1990s (Wade *et al.*, 2001).

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. Booth and Simmons (2000) discuss the emerging importance of total quality management to public service in parks and protected areas in New Zealand.

These three countries illustrate in broad terms how government policies can provide frameworks for a whole range of public and private activities, and foster a suitable environment for the development of nature-based tourism generally, and park tourism specifically. These policy-led efforts have helped to increase foreign visitation to the countries and to the parks in those countries. This, in turn, has led to increased demand for the maintenance of suitable levels of environmental quality and the development of suitable levels of service quality.

Trends in Park Establishment

Globally, the area of land covered by the world's parks and protected areas increased considerably from 1900 to 1996. By 1996 the world's network of 30,361 parks covered an area of 13,245,527 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 1 shows the growth of this network over a 100-year period. The impressive growth of the world's park network is the result of the widespread acceptance of the ecological ethic (Kellert, 1979) and aggressive political action. It appears that the tourism activity occurring at these sites has created a self-perpetuating phenomenon of visitation, education, and desire for more parks, visitation and education.

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. This approach is similar to that of consumer corporations, the use of a well-known name to indicate quality and status. However, with 3386 national parks in the world, it is clear that any one country has a major task to get its sites recognised globally as suitable destinations for international tourism.

There is no global tabulation of park usage. However, if visitation per park continued at a stable level, the increase in park area would lead to a corresponding increase in visitation levels. Many authors suggest that park tourism volume increased considerably over time (Driml & Common, 1995; Eagles & Higgins, 1998; Filion *et al.*, 1994; Wells, 1997). Strong growth in park tourism is

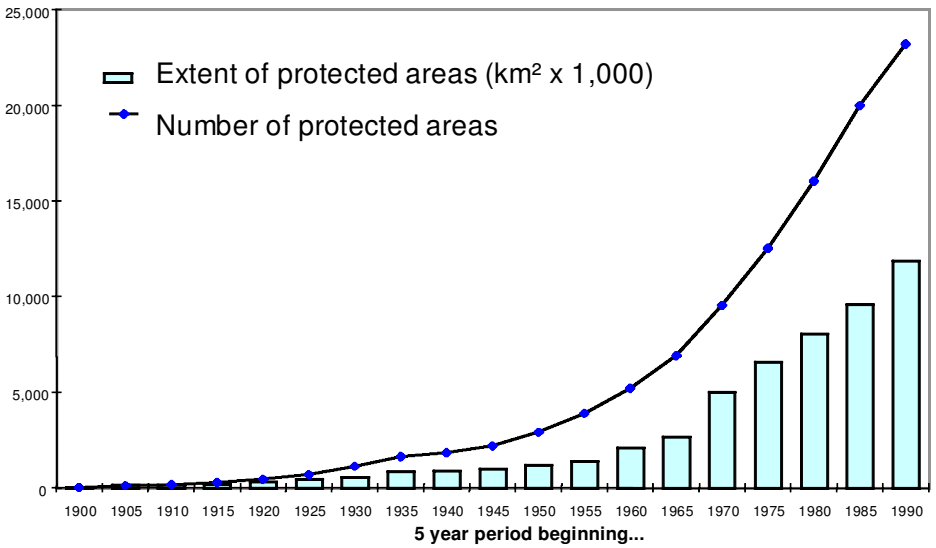


Figure 1 Global cumulative growth of protected areas

evident for Australia, Nepal, New Zealand, Tanzania, South Africa and Botswana. It is useful to look at this trend in one of these countries, Costa Rica, with growth in park visitation of 400% from 1985 to 1999 (Figure 2). The temporary decline in the early 1990s was due to a weak international economy combined with an 800% increase in park entrance fees introduced for foreigners. Later visitation levels recovered as the economy improved and a more suitable pricing policy developed (Baez, 2001). The large increases in park visitation over the last 15 years have led to many social, economic and cultural changes in Costa Rica (Eagles & Higgins, 1998). One of the most visible impacts is the increasing importance of nature-based tourism to the economics of park management of Costa Rica and to the economics of the national economy. Similar impacts are visible in other countries with prominent nature-based tourism industries.

Park Economics

Economics is an important component of societal decision-making that is, however, typically given low priority in the parks' world (Van Sickle & Eagles, 1998; Wells, 1997). Within many parks the strong emphasis given to ecology is seen by many park proponents as sufficient justification for public policy action. However, nature tourism is increasingly important within sustainable development because of the potential of contributing to local and national economic development (Lindberg, 1998; Wells, 1997).

Most of the world's protected areas charge low entry and use fees that cover only a portion of the costs of management (Van Sickle & Eagles, 1998; Wells, 1997). This pricing policy developed during a period where resource protection was seen as the most important objective, a public objective that benefits all of society. However, this logic falters when applied to outdoor recreation in parks,

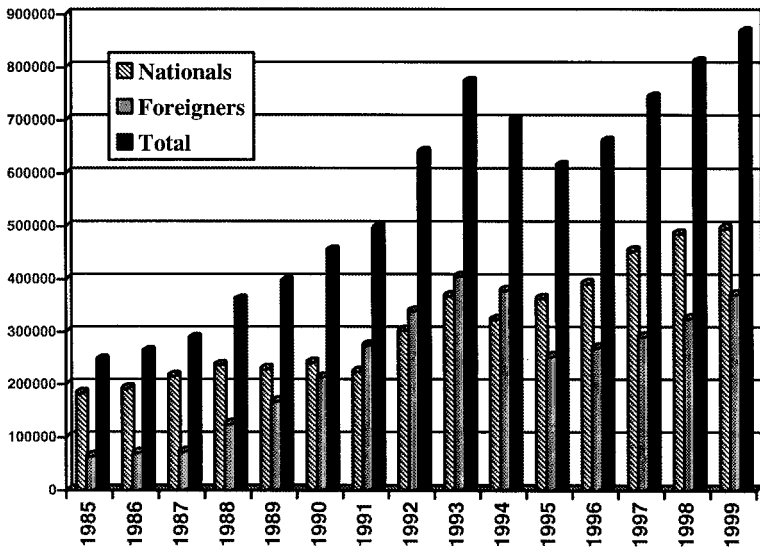


Figure 2 Visitation to Costa Rica national parks

as only those who participate in outdoor recreation are beneficiaries of this policy. It is increasingly difficult to justify public expenditure to subsidise 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. For example, the Parks Canada business plan summarises 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: 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 reserves² found that only 32 of 78 responding sites charged visitors admission fees (Tye & 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: 'better financed biosphere reserves are likely to be better managed, thereby attracting more tourists' (Tye & Gordon, 1995: 29). Presumably those reserves with more tourists also gained higher political profiles, allowing them to argue for more government grants. Some sites also earned income from user fees. It is important to recognise that substantial management budgets are necessary in areas of high usage to avoid and to remedy 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). With the centralised budget allocation process in many governments, park managers do not keep earned fees, and therefore see little

benefit in comprehensive fee collection. This in turn contributes to a low emphasis on park visitor management. Such issues as return rates, length of stay, visitor satisfaction and service quality all suffer when the financial return from the visitors is not tied directly to the financial operation of a park (Thomas *et al.*, 2000).

Many governments, however, see nature-based tourism as an important tool for economic development. Unfortunately, most have not invested sufficiently in the staff training, infrastructure or park resources that are needed to support nature tourism. This can expose sensitive sites to tourism-caused degradation (Wells, 1997).

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.* (1997) found in studies of parks in India, Indonesia and Zimbabwe there was no direct relationship between park budgets and park tourism revenues. In all these three countries revenue was collected locally and then submitted directly to central government.

The importance of park tourism is usually underrated due to lack of adequate information. The economic impact of park tourism is poorly known, not well documented and weakly communicated. This can lead to a severe under-representation of the importance of park tourism within the fiscal sectors of government and business. Therefore, the parks do not compare well to other economic generators, such as manufacturing or forestry, industries where the volumes and economic value of the products are carefully documented and reported within a continuous stream of information (Eagles, 1995). Wells (1997) documented that there are few regional or national studies of the economic impact of the tourism associated with parks and reserves. It is useful to look at some of the park tourism economic impact studies that have been done, using case studies from Canada and the USA.

Studies of the economic benefits of the park system for the Province of British Columbia in Canada found that in 1999 the parks generated 9100 jobs directly and indirectly (MWLP, 2001). The jobs created by parks are comparable to other industries such as newsprint (4200), metal mining (3800) and coal mining (3000). This parks' system contributed about C\$521,000,000 to the provincial gross domestic product. An earlier study in 1993 found the park visitors reporting non-market³ benefits of an additional C \$670,000,000 beyond the cost of operating the system by the province (Coopers & Lybrand Consulting, 1995). These studies became very important in revealing the economic significance of parks to public and private policy makers in Canada and elsewhere.

Parks Canada conservatively estimates the economic impact of all Canada's national parks, national historic sites and parks, and national canals to the nation's GDP at C\$1,250,000,000 per year. Around 30,000 person-years of

employment occur directly due to this spending. Non-resident visitors contribute 25% of visitor spending, or \$275,000,000 annually (Parks Canada, 1995).

Eagles *et al.* (2000) found 2,506,451,728 visitor days of recreation in 1996 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 total North American volume of 2.6 billion visitor days reveals a high level of tourism use not generally known and appreciated. Using the range of calculated total economic impact measured at US\$90 per day (OMNR & Econometric Research, 1993) to US\$141 per day (Carlsen, 1997), the overall value for park tourism ranges between US\$236 billion and US\$370 billion in Canada and the USA combined. Even these high estimates underestimate value, because they do not include option, bequest or existence value estimates. These figures must be accepted with caution, given some of the limitations of the data. However, the estimations show that park-based tourism is a very important economic activity in North American society.

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. Van Sickle and Eagles (1998) document the impacts of massive budget cuts on the 13 national, territorial, and provincial park systems in Canada in the early 1990s. All systems lost staff numbers. Ten closed facilities. Nine operated a smaller programme, did less maintenance on facilities, privatised services and undertook programme 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 programmes. Similar budget reductions are evident in the USA, South Africa, Mexico and throughout eastern Europe.

Driml and Common (1995) showed that the economic benefits of nature-based tourism in selected Australian locales far exceeded the government expenditures to manage those sites. The five World Heritage Areas of Great Barrier Reef, Wet Tropics, Uluru National Park, Kakadu National Park, and Tasmanian Wilderness experienced tourism expenditures in 1991/92 of A\$1,372,000,000. The total management budgets of the areas were A\$48,700,000, and the user fee income to the management agencies was A\$4,160,000. Therefore, the management budgets were only 3.5% of the tourist expenditures. The revenue raised by government through user fees represented only 8.5% of the government expenditures. This study highlights the very high financial value of tourism in the five World Heritage Areas concerned, 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 potential large increases in tourism use.

These studies reveal the importance of park tourism to the economies of several countries. They also reveal that many park agencies are poorly designed to take financial advantage of the overall societal economic benefits. To understand this apparent paradox it is useful to discuss park pricing policy and finance.

Park Finance and Pricing Policy

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-served approach. In some parks fees are also charged by the park agency for specialised 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. In the early 1990s in Canada fees provided an average of 17% of park budgets (Van Sickle & Eagles, 1998) and in the USA 18% (Brademas & Readnor, 1987). By 1998 state parks in the USA recovered 33.8% of budgets from tourism-related fees (McLean, 1999). These figures from the USA show state parks earning higher percentages of their budgets from tourism fees. This example reflects the increasing tendency of governments to require parks to recover higher percentages of their budgets from tourist expenditures, and the ability of parks to respond successfully.

Rarely do park managers undertake income and expenditure financial analyses, similar to those done by private businesses. Recent government policy directives demanding higher levels of income generation from park tourism in Ontario, Canada (Ireland-Smith, 2001) has led to the development of such analyses. Bowman (2001) found that the expenditures per visitor per day in Algonquin Provincial Park in Ontario varied dramatically, with day visitors⁴ spending the most at \$208.00, and car campers⁵ the least at \$27.70 (Table 1). This research found that park management earned the most income from the two groups that spent the least per day, car and interior campers.⁶ Conversely, the management earned the least from the people who spent the most, day visitors and lodge visitors.⁷ Two important user groups, bus tour visitors⁸ and children's camp users⁹ were not studied. This analysis shows the need for a complete re-evaluation of the pricing and income policy of this important park. Similar analyses in other parks may reveal that the park income from tourism is not maximised due to an inadequate knowledge of tourism expenditure patterns and deficient pricing policies.

Table 1 Algonquin Provincial Park visitor expenditures

<i>User Type</i>	<i>Expenditure</i>	<i>Percent of total</i>	<i>Exp. per day</i>
Day visitors	\$7.6 million	38	\$208.00
Car campers	\$4.8 million	24	\$27.70
Interior campers	\$4.0 million	20	\$28.70
Lodge visitors	\$2.8 million	14	\$117.50
Cottage leaseholders	\$0.7 million	4	\$4,809 per year
Bus trippers	Unknown	Unknown	Unknown
Children's camps	Unknown	Unknown	Unknown

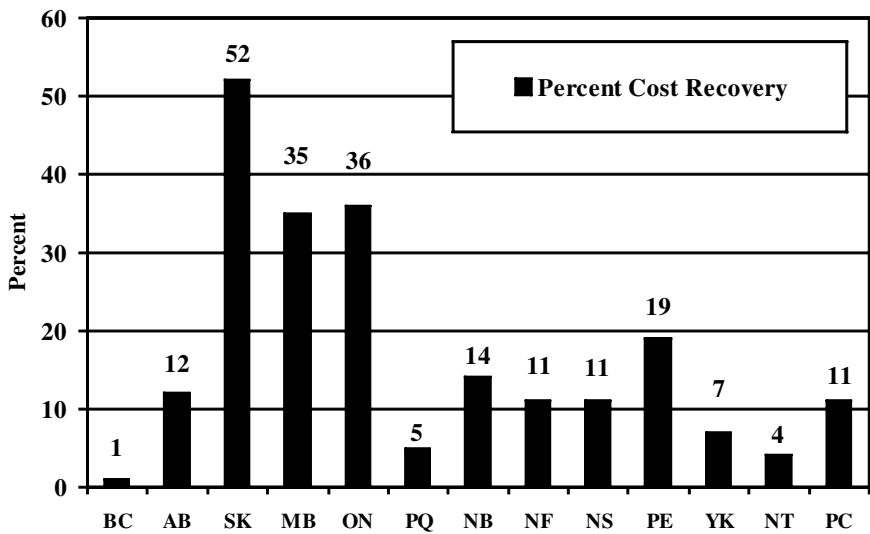


Figure 3 Cost recovery of Canadian Park agencies in early 1990s

The lack of financial analysis and expertise in parks leads to widely variant financial return figures. Van Sickle and Eagles (1998) found a wide range in cost recovery for the 13 federal/provincial government park agencies in Canada in the early 1990s (Figure 3). The recovery of management costs from tourist charges varied from only 1% in British Columbia, to slightly more than 50% in Saskatchewan. Goodwin *et al.* (1997) found in three parks in India, Indonesia and Zimbabwe that the income from tourism varied from 7% to 24% of total expenditures. Those variations were shown to be largely due to government policies dictating the financial structure of the agencies. They were not due to the volume of tourism nor to the amount of area being managed. Those with the lowest level of cost recovery 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.

Generally 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. A parastatal is an independent corporate body within government that 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.

In the mid 1990s, under vigorous government budget cutting, Parks Canada (1995) 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 obtained government permission (a) to retain and reinvest all revenues, (b) to plan and

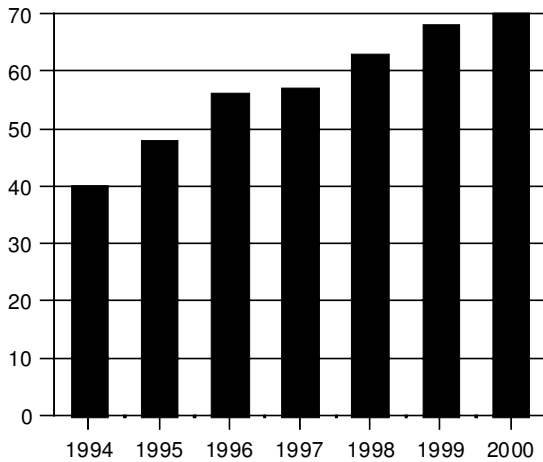


Figure 4 Parks Canada income

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 moved 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, the Canadian Parliament passed new national parks legislation in 1998.

By fiscal year 2000/2001 Parks Canada had gross revenues of C\$84.7 million, a 111% increase since 1994/1995 (Figure 4). Three sources of income were prominent revenue sources: entry fees with C\$30.1 million, rentals and concessions with C\$14.3 million, and camping fees with C\$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 (Parks Canada, 2001).

Even more dramatic results have occurred in Ontario where government restraint, a new management structure, and increased business acumen resulted in budget recovery levels from tourism increasing from 36% of park expenditures in the early 1990s to 80% in 2000 (Ireland-Smith, 2001).

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 were phased out, leaving the parks with the options of increasing income from tourism or cutting staff and services. In 1999 the South African National Parks (SANP) system was at 80% budget recovery from tourism (Msimang, CEO, SANP, personal communication, 21 May 1999), and moving quickly to 100%. SANP operates an impressive array of tourism businesses in the national parks, sometimes via their own staff, sometimes by licensed concessionaires. A diverse set of income generators is utilised to gain sufficient income to reach the public policy

goal of financial self-sufficiency. Additionally, staff reductions and new private concessionaire agreements were utilised to match income to expenditures.

South Africa is an 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, cottages and hotels. The private sector is heavily involved in the upper range market, providing two or three levels of highly priced accommodation 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 (Eagles, 1999).

Globally, differential fees are becoming more common. Typically foreigners pay more, and sometimes much more, than nationals. 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.

These examples show that the economic impact of park tourism is often large and important. Park managers are becoming more successful in developing approaches to increase income levels for park tourism, thereby shifting the park management burden from taxes to tourism fees and charges. It is important to understand park finance, pricing policies and potential income sources so as to plan better for more effective tourism income policy development.

Table 2 summarises the full range of income generation opportunities in park tourism available to park agencies and their private sector partners. 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

Table 2 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 3 Parks Canada revenue sources for 2000/2001

<i>Revenue source</i>	<i>Revenue amount</i>
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

of these names and images. Cross-product marketing occurs when one product or organisation advertises in concert with another. An example now occurs in Ontario, Canada where the park agency works closely with 30 different companies in shared marketing efforts (Adair-Smith, 2001).

Table 3 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, rentals and concessions and camping fees. It also reveals that the agency is not taking advantage of the majority of income sources shown in Table 2. For example, lucrative income sources such as food and merchandise sales were not utilised directly. However, some income from these sources is earned indirectly through concessionaire royalty payments and fees.

Australia is a typical example with most park agencies in the country relying on only a few 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: 133). This inquiry

Table 4 Implications of tourism 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

apparently did not recognise, which is commonly the case, that there are many sources of income that can be obtained from various tourism sources beyond entry fees.

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 increases (Baez, 2001; Goodwin *et al.*, 1997). 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. However, increasing income from tourism has many implications for management (Table 4). A more business-like approach to management becomes necessary. This includes the ability to retain and utilise all income, a major change for most government agencies. Given the need for income, park visitors become more important. Their opinions on programmes, their length of stay, their return rates, their facility and programme 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.

There are resistance factors when a park agency moves to increased dependence upon tourism income (Table 5). 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 law prohibited fees for many years. The private sector in tourism usually objects to any fees, and especially to any increase in fees. It is obvious to many business people in tourism that substantial income can be earned by providing services to park visitors. These people can 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 important income sources.

Park agencies' marketing, pricing policy, economics and financial expertise usually need to be upgraded. The associated requirements for staffing adjustments lead many park staff to vigorously object to a park agency operating as a business. Important sectors of the public, such as environmental groups,

Table 5 Resistance factors to tourism 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

sometimes object to the business operation, due to fears of over-commercialisation and resistance to fee increases.

However, if a park agency is serious about increasing its reliance on tourism-based income, it requires specialised expertise in tourism planning and management.

Tourism Planning and Management Competencies

All national parks and protected areas have some level of visitor use, varying from a few to millions of visitors per year. Historically, much visitor management is reactive, rather than proactive. The parks receive whatever visitor use 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. Visitors are expected to make their opinions about activities and services known through management reviews or through complaints, or not at all. In the 1990s however, it became more common for park agencies to evaluate and monitor the wants and levels of satisfaction of their visitors (Peterson & Loomis, 2000).

Many park agencies are developing professional expertise in leisure pricing policy, in tourism economics, in marketing, in tourism management, in social statistics, in service quality or in leisure studies. This is stimulated by the need of the agency to better understand tourism in order to gain increased operational income. This effort is particularly strong in North America and East Asia where park managers see tourism as an important source of income (Eagles *et al.*, 2001).

Visitation statistics

Management 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. All production enterprises need thorough, accurate, and up-to-date data on the numbers and timing of the production and subsequent sale of their products. Most parks are required by government policy to collect and report park use levels. In practice, this activity varies in scope from non-existent to sophisticated. Within a park system the summarised data from individual parks provides overall tourism use figures. However, comparisons amongst systems can be problematic owing to different approaches.

In order to provide accurate and complete park tourism data for public use, there is a need to standardise, in parks, in countries, and globally, the definition, the collection procedures, and the reporting of park tourism statistics. Such statistics can potentially influence public policy discussions on park tourism. Recently, international efforts have encouraged higher quality and standardised approaches to visitor use data collection and reporting.

The World Commission on Protected Areas has released guidelines for the measurement of public use of parks and protected areas (Hornback & Eagles, 1999). This manual provides standardised 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 standardisation of park tourism measurement generally, and specifically for future editions of the United Nations list of national parks and protected areas (UNEP-WCMC, 2001).

Tourism management structures

Typically, government agencies have managed parks with employees working within a hierarchical form of decision making. Budgets come from a central government allocation, with park income returned to a central government pot. Concessionaires licensed by the agency for a period of time provide many visitor services, such as accommodation, tours, and consumer products. This management model is widespread and reasonably effective when central government provides sufficient budget. However, it can be ineffective in several respects. The budgets are not closely tied to tourism use levels, so park management is severely limited in its ability to respond to increases or other changes in visitation levels. The park staff concentrate on the key people 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 low. This model is problematic when a powerful private tourism sector overwhelms a politically weak government agency. In this situation, the selfish individual interests of the tourism operators can lead to tourism overuse and environmental degradation due to the lack of budget for the agency to handle tourism pressures.

Recognising the limitations to government agency management, experimentation with park management structures is under way. Three models are worthy of discussion: the parastatal agency, the non-profit corporation, and the private, for-profit corporation.

Some governments utilise a parastatal form of operation for parks, with eastern and southern Africa leading the way. Parastatal structure can be financially efficient, with management flexibility to establish pricing and tourism policies suitable to the needs and the market. 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. There is a flat management structure, with few administrative layers. There is management flexibility by individual parks and agencies and correspondingly low levels of central control by government. The parastatal agency's advantages for tourism management have recently led some governments to adopt this model for their park agencies. Examples include Parks Canada and Ontario Parks, Canada's two largest and oldest park management agencies.

Some countries utilise non-profit corporations to provide some tourism services. These often take the form of membership groups, 'Friends Groups', that can provide specialised services, such as guiding, information dispersal, and recreation management. Such groups have the advantages of a parastatal plus the additional ability to mobilise 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 leads to park development and park management handled by private companies. The Lesotho Highlands Development Authority constructed 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. The Authority hired a consulting firm to select, plan, design and construct a system of protected areas within the development area. 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 (Eagles, 1999).

The government agency approach is still strong, but in some locales is being replaced by a parastatal form. Parastatals now manage the national parks in Canada, Kenya, Tanzania and South Africa. The move is stimulated by the increased managerial and financial efficiency of such a management structure.

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 summarising within two headings: (1) park tourism opportunities, and (2) park tourism challenges.

Park tourism opportunities

If the parks work within a competent, coordinated system, and have sufficient finance to operate the parks that exist, it is possible to develop a coordinated tourism management system that successfully manages park tourism. 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. Significant natural resources, a high market profile, and a quality service industry are three prerequisites for effective utilisation 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. Those sites that have better information technologies are much more effective in attracting international tourism. Unfortunately, some 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 may provide more information than do the parks. This can be an advantage if the information is accurate and appropriate, but it can be problematic if the park cannot handle the resultant tourism traffic. It can also be a problem if the information is wrong, or purposely misleading.

Park tourism challenges

Many parks are not 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 distant destinations.

Most parks have insufficient numbers of people with expertise in tourism, marketing, service quality evaluation, and international ecotourism. 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 tend to 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 programmes aimed at nature-based tourism. For example, the National Parks Service of the USA has developed a suite of national cooperative research and training institutes at first-line universities in that country (M. Soukup, National Parks Service of the USA, personal communication, 24 November 1997). Parks Victoria in Australia funded a major cooperative research and education unit at Deakin University in Melbourne (D. Weston, Parks Victoria, personal communication, 17 November 1997). Such cooperative units are not found in most countries in the world. This deficiency results in a paucity of professional level expertise in the specialised 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 programme for sustainable tourism with the Cooperative Research Centre for Sustainable Tourism (CRC Tourism). This operation involves university, government department, and private sector cooperation into cutting edge and applied tourism research (De Lacy & Boyd, 2000).

Many parks are unknown outside the local area, and have weak mechanisms to provide a higher level of profile; many parks also 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 emphasise international visitation.

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 in the negative.

Many park administrations show weak understanding of the global ecotourism market, without a policy envelope, an administrative structure, or a staffing complement that recognises an international role. An obvious example of the lack of understanding of international tourism is the frequent inadequacy of programmes and facilities for the international visitor. Visitation is often not directed through a well-designed system of information for international visitors.

Lack of multilingual facilities and publications have already been commented on. Prebooking of campsites, trails and other park visitors is very difficult for non-locals. International tourists often find it impossible to utilise travel agents to facilitate visitation to 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 sporadic, and when it is available, may be difficult to access for international visitors. Access to guides, specialised information, or ethnic food is important and is typically not provided by the park agency. Cooperation 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. Given the park agency tourism service limitations, specialised travel books and private tourism companies often fulfil the need and provide valuable services to international park visitors.

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 park and game reserve tourism 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 park tourism 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 require government investment for capital and for operational start-up funds. Government allocations are most successful when made within the context of a carefully constructed national, provincial, and agency policy environment, as discussed above for Australia, Tanzania and New Zealand. In developing countries, capital development for park tourism is occurring through various forms of foreign aid. The Global Environment Facility provides grants and soft loans for biodiversity conservation (GEF, 1996) and infrastructure development in many parks and protected areas, with the long-term operational funds to come from tourism (World Bank, 1998).

Park tourism summary and conclusions

If park tourism is to have the level of public policy recognition that it deserves, a consistent and thorough procedure for the collection of visitation and economic data is required. The World Commission on Protected Areas wishes to standardise the collection and use of park tourism data (Hornback & Eagles, 1999) and the finance of parks (Athanas *et al.*, 2001; Thomas *et al.*, 2000). The goals of these efforts are to standardise approaches and methodologies and to encourage the widespread collection and dissemination of the output.

With better documentation of tourism's volume, impact, and management, efforts are also under way to evaluate the park's management effectiveness (Hockings *et al.*, 2000). The development of management effectiveness guidelines

Table 6 Park 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

and procedures can assist policy makers, senior management, and the public in improving capability of park managers and their institutions. This is an important innovation, in that park tourism is treated as an essential and integrated component of overall park management.

Many parks are moving towards parastatal management structures that function like corporations within government. This involves (a) agency retention of fee and licence 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. Higher use fees are charged. A 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 interested in tourism are developing suitable management competencies within their own organisation (Table 6). The park visitors' needs and wants are increasingly emphasised, as is service quality management, often with specific service quality targets. Pricing policy is a major field in business management, and a critical component of the operation of most corporations. Many park agencies are re-evaluating their pricing and hiring specialists in leisure pricing policy. Leisure marketing is the specialised field concerned with developing a solid understanding of the client, the product, and developing means to match the two. Some park agencies are developing specialised expertise in leisure marketing in-house. Those agencies that function like a corporation need specialised finance expertise. Park agencies with financial responsibilities are developing staff expertise in this area. Tourism management is a large and specialised field that is as broad and complex as resource management. Many agencies note that people trained in biology, forestry and resource management typically have little professional training in the fields listed in Table 6, and therefore, they are retraining existing staff, or hiring new staff.

The negative impact of tourism on park resources is less influenced by numbers of visitors, and more influenced by management effectiveness (Manning, 1999). Very low levels of finance often cause weak management. Parks with sufficient expertise and finance can competently manage park tourism, with low levels of negative environmental impact and high levels of positive economic impact. The key issue is developing a management framework that emphasises staff

expertise in tourism and financial competence. Tourism, within many park agencies, can provide significant levels of income if there are appropriate legislative, policy and management structures as well as competent staff with appropriate training.

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 more competent and successful park management. Through this process the goals of sustainable tourism, as part of a wider trend to more sustainable development, should become achievable.

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Notes

1. This paper is a substantial revision of a paper given at the International Symposium on Society and Resource Management (ISSRM) in Brisbane in 1999. See *Journal of Sustainable Tourism*, 9 (3), 167, for further details.
2. Biosphere reserves are areas of terrestrial and coastal ecosystems promoting solutions to reconcile the conservation of biodiversity with its sustainable use (UNESCO, 2002).
3. The total economic value of a protected area is the sum of the *use values* and the *non-use values*. Use value may be direct or indirect. Direct values are considered to be market values. Indirect values are non-market values. Non-use value may also be broken into different categories: *option*, *existence* or *bequest* value (Eagles *et al.*, 2002).
4. Day visitors are park visitors that enter the park by vehicle, other than a tour bus, and do not stay overnight in the park.
5. Car campers are park visitors that stay overnight in the park in a front-country, vehicle-accessible campground.
6. Interior campers are park visitors that stay overnight in the park in back-country campsite that is only accessible by long-distance hiking or canoeing.

7. Lodge visitors are park visitors that stay overnight in a lodge.
8. Bus tour visitors visit the park during the day using a tour bus for transport. They do not stay overnight.
9. Children's camp users are children who stay overnight in a specialised children's camp.

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