Protected Area Visitor Fees

Country Review

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This document is part of a set of related papers:

- 1. Overview describes general issues and "lessons learned" in the context of visitor fees.
- 2. Country review describes fee systems and experience in various countries.
- 3. Summary a distillation of the above two documents, with a focus on Belize. Includes a table summarizing fee levels and related issues across marine protected areas.

Two important requests:

Please reference these documents appropriately if you use material from them.

We have tried to provide the most up-to-date and accurate information possible. However, fee systems change over time. Therefore, please help us maintain the accuracy of the material by emailing Kreg Lindberg (k.lindberg@mailbox.gu.edu.au) with any updates or corrections.

We will update these documents periodically, so check back for newer versions.

Notes:

These documents were prepared as part of the "Generating Revenue through Ecotourism for Marine Protected Areas in Belize" project funded by the Summit Foundation and conducted by The International Ecotourism Society and Programme for Belize.

The focus is on marine protected areas in developing countries, but terrestrial protected areas and developed countries are also covered to some extent. The focus is on entrance fees. Typically, park systems also charge several other types of fees (e.g., permits for commercial operators, mooring fees, etc.). Such fees are reported where possible, but these documents are neither comprehensive nor official statements of fee policies.

Unless otherwise noted, all monetary figures are presented in US\$. The following abbreviations are used in these documents: PA=protected area, MPA=marine protected area, NP=national park, MR=marine reserve, MP=marine park

The documents are based on a combination of published and unpublished papers, as well as "personal communication" with site managers, tour operators, environmental NGOs, and others. Written documents are referenced following academic convention, and URLs are provided where available.

Lastly, we would like to thank the numerous individuals and agencies that provided information and data!

This document reviews fee levels and related issues across several countries. Academic references cited in this paper are presented in the Overview document.

Australia

NB: Figures in this section are in AU\$. In April 2001, the exchange rate was approximately AU\$2 = US\$1.

No fees are charged at the 12 MPAs managed by the national agency Environment Australia. There are few visitors to these MPAs, primarily because all are more than 3 nautical miles from the Australia coast.

At the Great Barrier Reef MP, an "environmental management charge" (EMC) is paid by all commercial visitors (Davis, Tisdell, and Hardy 2000). The EMC was introduced in July 1993 with the initial charge being \$1 per visitor per day. The goal was to recover part of the management, research, and education costs associated with visitation at the park. In 1996, the national government, which is responsible for the park, announced that the EMC would be increased to \$6. As a result of industry lobbying, the increase was reduced to \$4 and was phased in over a couple years. There is a maximum fee of \$12 (i.e., visitors are only charged for a maximum of 3 days on a single trip). Operators pass this cost on to passengers as part of the ticket price or as a separate cost of the park visit often levied once the visitor is on board a vessel.

Fee revenue goes to the national treasury, but then is returned to the park via a special appropriation. In 1997-98, \$3,585,120 was collected as EMC, and this represented 19% of the total national government funding for the park. A quarter of the fee revenue is allocated to the CRC Reef Research Centre located in Towsnville.

As noted by Davis and Tisdell (1999), visitors who come to the Ningaloo Marine Park in Western Australia pay \$15 per day for the opportunity to swim with whale sharks, with revenue being used for research, management, and education about the whale sharks (including the cost of the management agency boat that monitors tour operators in the area). As is often the case, the industry opposed the fee when it was announced in early 1994, in part because it was implemented only two months from the beginning of the season (at which point many tours had already been sold) and in part because the industry felt that self-monitoring was possible (and thus funding of the agency monitoring program was unnecessary). The resulting negotiations led to a reduction in the fee to \$7 in 1994, but the full fee of \$15 was charged starting in 1995 (children under 16 pay \$7.50). Visitors receive a "souvenir quality validation pass" through fee payment.

Visitors surveyed at Ningaloo indicated that the fee was generally acceptable, with 7% saying it was too high, 77% saying it was about right, and 16% saying it was too low. Half of the visitors said they would be willing to pay a higher fee. Whale shark visitation has been decreasing over

¹ Further details at: http://www.environment.gov.au/marine/mpa/commonwealth/cthmpa.html

the past 2-3 years, but this is attributed not to the fee but rather to other factors, including cyclones, economy, fuel prices, and the Olympics (held in Sydney).

Many MPAs in Australia are managed by the states, which each have their own "national parks" agency. They also have their own policies with respect to fees. ANZECC (2000) provides a good overview of the Australian experience with user fees. In addition, the Cooperative Research Centre (CRC) for Sustainable Tourism recently has undertaken a review of entrance, camping, and other fees conducted as part of the Nature Tourism National Review project. For further information and copies of the report, contact Ralf Buckley (r.buckley@mailbox.gu.edu.au).

Most states, but not all, charge daily entrance fees for public access to at least some of their national parks (see tables), with most fees being levied on a per vehicle basis. Annual park passes are available, and some states offer holiday passes of 4 to 8 weeks. Parks Australia, the national agency that manages six national parks, uses an entrance fee system that entitles the bearer to a three, seven or 14 day per vehicle or per person pass, depending upon the park.

Summary of park agency entrance fees (fees generally are not charged at all parks within each state)

State	Agency	Annual passes for cars	Daily fees per car
Queensland	QPWS	N/A	N/A
NSW	NSW NPWS	\$20.00 - \$80.00	\$3.00 - \$15.00
WA	CALM	\$17.00 - \$73.00	\$9.00
Victoria	PV	\$30.00 - \$63.00	\$5.50 - \$9.00
SA	NPWSA	\$55.00 - \$170.00	\$6.00 - \$36.00
Tasmania	PWS	\$19.80 - \$46.20	\$9.90
NT	PWCNT	N/A	N/A
ACT	EACT	\$11.00	\$8.50

N/A = not applicable (i.e., no fee charged), NSW=New South Wales, WA=Western Australia, SA=South Australia, NT=Northern Territory, and ACT=Australian Capital Territory.

Summary of concessions (discounts) available

	Daily entrance fees				Annual Park Passes	
	Children	Pensioners	Seniors	School & Coach Groups	Seniors	Pensioners
Queensland	N/A	N/A	N/A	N/A	N/A	N/A
NSW	×	√	✓	✓	√	√
WA	√	√	✓	✓	√	√
Victoria	NI	NI	NI	NI	×	×
SA	√	√	√	✓	×	1
Tasmania	×	×	×	✓	√	√
NT	N/A	N/A	N/A	N/A	N/A	N/A
ACT	N/A	N/A	N/A	N/A	N/A	N/A

N/A = not applicable, NI = no information, \mathbf{x} = concession not available, \mathbf{v} = concession available.

With respect to opposition to fees or fee increases, the Tasmanian park agency reports that the strongest opposition was from local communities. Fees are now well accepted (6 years since implementation), and locals recognize them as a means of sharing management costs with the 70% of users who are from outside the state. In Victoria, opposition to fees is also seen as a localized issue, relating to people's perceived "backyards." Tourists usually do not question the imposition of fees to enter a park, as they have already made the decision to invest in the trip. With respect to notification, twelve months advance notification was provided for fee hikes in Tasmania. In Western Australia, the agency (CALM) generally provides 12-18 months notice.

Allocation of fee revenue varies across states. In Tasmania, it is retained by the agency for maintaining and upgrading visitor facilities, which is critical for local acceptance. In Western Australia, funds raised through fees are retained by the district office or specific park. In addition, there are often educational campaigns. For example, in Tasmania, the benefit of fees is reinforced by noting that specific projects are funded from park fees.

Bahamas

The Exumas Land & Sea Park charges for entry to the park, which is run by the Bahamas National Trust. Fees are as follows:

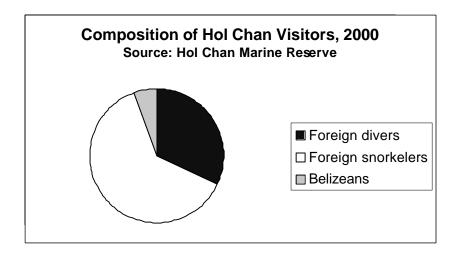
- ! Daily fee for private vessels: \$5/day though not always enforced.
- ! Charter vessels: for private charter, dive charter, kayak charter: \$1/foot/day.
- ! No charge for Bahamian pleasure and tour vessels.

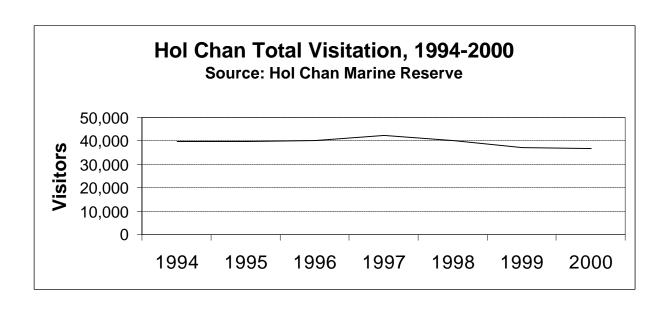
- ! Mooring fees: <45 feet \$15/day; <55 feet \$20/day; <70 feet \$30/day; <90 feet \$50; 90 feet \$100. They have approx. 22 moorings near the headquarters, and several others scattered throughout the park.
- ! Special "Support Fleet Membership" (for vessel owners who wish to support the park financially) entitles 2 free nights of moorings and no daily fee: <45 feet \$50/yr; <55 feet \$60/yr; <70 feet \$80/yr, <90 feet \$120/yr; 90 feet \$220/yr.

Belize

As of August 2000, there were 12 marine protected areas (MPAs) in Belize, of which seven were designated World Heritage Sites. However, only five of these 12 (and only four of the seven WH sites) have had active management for at least one year. As in other countries, a key reason for this lack of management is lack of funding -- government resources are extremely limited. Adequate management of the eight marine reserves under Fisheries Department jurisdiction is estimated to cost \$80,000 per reserve per year excluding capital expenditures, yet the whole department, with responsibilities that go well beyond reserve management, receives government funding of only \$225,000 per year.

Two MPAs, Hol Chan Marine Reserve and Half Moon Caye Natural Monument, currently charge fees (\$2.50 and \$5.00, respectively), though Belizeans generally are not charged. The following figures illustrate visitor composition at Hol Chan, as well as visitor numbers over time.





Botswana

Spergel (2001; referencing work by J.I. Barnes) reports that Botswana raised its national park entry fees for foreigners by 900% in 1989. Despite this jump, foreign visitation increased by 49% in the first two years, and the resulting increase in revenues effectively eliminated the need for government funding. Nonetheless, not all of the added revenue has been used to maintain the country's parks.

Brazil

Brazil has 2 marine national parks, as well as other protected areas in marine territory. Abrolhos Marine National Park (archipelago) is the largest coral reef formation in the South Atlantic and a breeding ground for humpback whales. Fernando de Noronha Marine Park is an island of volcanic origin. Fees are R\$ 10 (about \$4.25) per day. In the case of Fernando de Noronha, the island (which is not all national park) also charges a fee that increases per day. Thus, it becomes very expensive for stays of more than a week. In Brazil as a whole, national park fees are typically in the range of R\$3 to R\$6.

Opposition to fees comes not so much from the tourism industry as from concerns about poor people not having access due to high fees. Both Abrolhos and Fernando de Noronha have "carrying capacity" limits on numbers and worry more about over-visitation and the granting of licenses to operators.

Fees go to the general treasury (of IBAMA). According to new Conservation Unit legislation, 50% of fees collected stay in parks, though revenues are not sufficient to cover all park costs. Fees have not reduced visitation.

British Virgin Islands

Dive fees currently are \$1 per diver per day, collected by dive operators as part of the trip cost. This revenue source is supplemented by mooring fees charged to both divers and boaters (there are approximately 180 mooring buoys throughout the BVI). Fees are as follows:

Category	Fee
Commercial	
BVI Based Charter Boats (5 people or less)	\$10 per week or \$150 per year
BVI Based Charter Boats (6 people or more)	\$15 per week or \$225 per year
Foreign Based Charter Boats	\$25 per week or \$375 per year
BVI & Foreign Day Sail or Dive Boats	\$1 per person per day
Private	
BVI Based Boats	\$25 per year
Foreign Based Boats	\$50 per year

Geoghegan (1998) reports that most of the funds are collected through the charter boat and dive operators and then passed on to the National Parks Trust, with non-commercial users purchasing permits directly from the trust. As of 1994, the system generated \$165,000 annually and was self financing (Brown 1995 provides additional background). A new fee system is expected to be implemented in the near future.

Canada

NB: Figures in this section are in CD\$. In April 2001, the exchange rate was approximately CD\$1.55 = US\$1.

According to a recent article,² Canada is experiencing the same budget pressures as in the US and elsewhere: "Canada's 39 national parks are experiencing strain as tourists swarm to destinations like Banff and Jasper for the wilderness experience. In 1998-99, the parks received 15 million visitors. However, ... the infrastructure has deteriorated because the majority of it was built in the 1960s and '70s." Like the US, one response to this situation was to raise fees. Entry fees are charged at most national parks and national historic sites in the country, and most of the fee revenue remains in the particular park or site where it is collected.

As of early 2001, entrance fees per day for Flowerpot Island at the Fathom Five National Marine Park were as follows.

Adult	\$3	.00

²Ottawa Citizen, 25 January 2001, p. A6.

Senior (65 years and over)	\$2.25
Youth (6 to 16 years)	\$1.00
Child (under 6 years)	Free
Family	\$6.00

There is also an annual dive fee of \$8.00.

At Gwaii Haanas, a coastal sanctuary of 138 islands including a World Heritage Site, Parks Canada is planning a future of Gwaii Haanas National Marine Conservation Area Reserve. There currently are no fees for the marine conservation area, but there are fees and preregistration processes for visitors to the islands of Gwaii Haanas National Park Reserve/Haida Heritage Site. The entry fees are as follows.

Adult - Day Use, per day	\$10.00
Adult - 1 to 5 nights, per night	\$10.00
Adult - 6 to 14 nights	\$60.00
Adult - Seasonal	\$80.00
Child (17 and under)	Free

Cook Islands

The Cook Islands have a \$10 airport tax, with 20% earmarked for the Environmental Protection Fund, similar to the PACT program in Belize. Spergel (2001) notes that several years ago the Ministry of Finance tried to use fund revenues for non-conservation purposes, but the Environment Council (the fund trustee) successfully sued the ministry, and fees are now deposited directly into the Council's bank account rather than going to the Ministry of Finance. This example illustrates the value of maintaining independence from governmental treasuries.

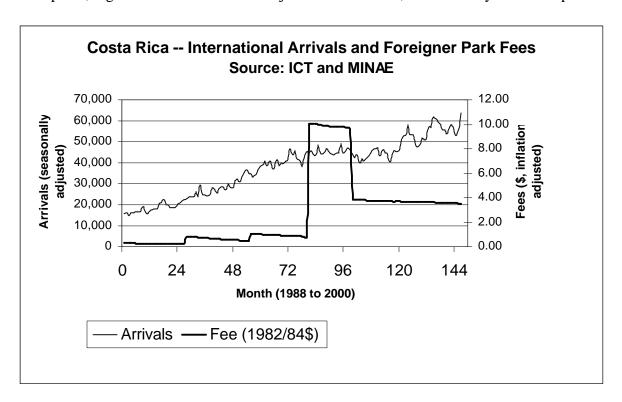
Costa Rica

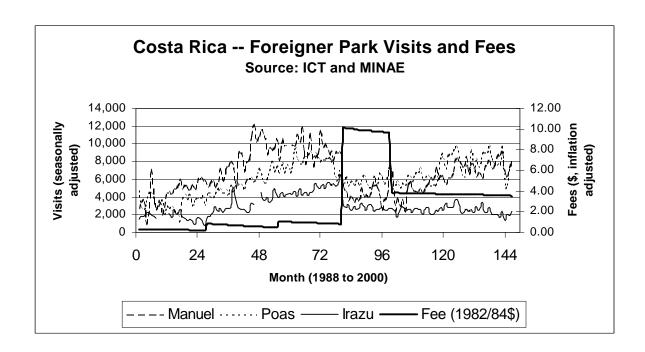
At Cocos Island, there is a fee of \$105 per person per trip plus a \$28 dive tax per trip. In the country as a whole, fees have been a contentious issue. Costa Rica has a long history of charging fees (see Lindberg and Aylward 1999), but they were very modest until the mid-1990s, when they were increased dramatically. The tourism industry has opposed increases, even when they were modest. For example, Lee and Snepenger (1992) report that tour operators at Tortuguero National Park in Costa Rica considered a boycott of the park to protest an increase in fees from \$0.28 to \$1.11. When fees were increased more dramatically in the mid-1990s, they were blamed for a national income loss of \$65 million due to reduced tourism spending.

However, research suggests that fees have not had as great an impact on visitation as it might seem. Based on responses to visitor surveys, Chase et al. (1998) estimated the following price elasticities for international tourism at three national parks: -2.87 for Volcán Poás, -1.05 for

Volcán Irazú, and -0.96 for Manuel Antonio. One of these indicates significant price responsiveness and the other two roughly unitary elasticity (neither elastic nor inelastic). However, in an analysis using actual price and visitation data for the same parks, Lindberg and Aylward (1999) found elasticity values of -0.0513, -0.296, and -0.238, respectively. These values indicate that fees do have a negative impact on visitation, but that the effect was not as strong as predicted in the Chase et al. study.

In any case, opposition to the fees led to a reduction from a high of \$15 to the current level of \$6. The following figures show seasonally-adjusted international arrivals and visitation at the above three parks, together with the inflation-adjusted entrance fee, from January 1988 to April 2000.





Ecuador

The fee at Galápagos National Park is \$100 for foreigners and \$6 for citizens, with the number of foreign visitors increasing each year and currently approaching 80,000 (Spergel 2001). Ninety percent of the fee revenue is used to protect and maintain the Galápagos environment.

According to the World Heritage electronic newsletter,³ the Inter-American Development Bank will provide a \$10.4 million loan to help launch a \$13 million Ecuadorian program to reverse increasing environmental threats to the Galápagos Islands. As an illustration of the role of tourism fees in conservation, the remaining funding of \$2.6 million will come from entrance fees paid by visitors to the Galápagos.

Egypt

The Gulf of Aqaba Protectorates include Ras Mohammed NP, Tiran-Senafir NP, Sharm-el Sheikh Protected Coastline, Nabq MRPA, Abu Galum MRPA, and Taba Coast Protected Coastline. An entrance fee of \$5 per person for foreigners and EP5 (\$1.25) per person for Egyptians is charged at Ras Mohammed NP. Van't Hof (1996) reports that the Ras Muhamed Marine Park is completely self-financing through fees (c.f., Pearson and Shehata 1998).

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³14 November 2000.

Industry opposition is "usually none" due to discussion, justification, and suitable notification to change tour prices. Government has given up to six months notice, but a new law may increase notification time (possibly to one year for existing and two years for new fees).

Collection mechanisms: Registration of departure at the jetties and settlement at the end of the month. By land daily payment at the entrance of the park. Fees are allocated to the environmental fund under the Ministry of Environment, as are fines and other income from the park. Funds are used to provide mooring buoys, patrol boats, oil combating equipment, etc. Fees have not lowered visitation, due perhaps to the increased value for the area, higher guest expectations, and good feed back.

At the Red Sea MP, part of the Red Sea Protectorates, fees are \$2/day for divers and snorkelers, to increase to \$5/day by the end of 2001. The dive tourist industry is in general opposed to any fees that would impact on their business, although a minority of the dive operators support the fee if (a) it is applied to all areas of the Red Sea, and (b) if the benefits are used to support Red Sea conservation. There is a concern by Hurghada dive operators that the imposition of fees within the Hurghada area (within which fees are collected for certain, but not all, reefs) will cause a shift of tourist business south to the next node which is at Safaga.

The fees began in April 2000, so it is too soon to determine changed attitudes over time amongst industry members. When the fee was initially set at \$5/person/day by the Egyptian Environmental Affairs Agency (as was the case at Ras Mohammad National Park), the industry successfully lobbied the government for a reduction to \$2. Nevertheless the rate is scheduled to return to the initially proposed \$5 by the end of 2001. The industry was given 3 months notice regarding the implementation of a fee (April 2000). Dated tickets are sold to boat captains (to cover the expected number of tourists they will carry the following day) by the Red Sea Protectorates office in Hurghada, Egypt. There are no direct sales to tourists.

Revenues are paid into the Egyptian Environmental Trust Fund. The fund is a new mechanism for Egypt and is managed by the country's environmental affairs agency, under the authority of the minister. All funds are used for environmental protection projects, which may also include the "brown sector," and not necessarily the "green sector" or protected areas. However, to date the Red Sea Protectorates has benefited greatly by fund allocations.

Imposition of fees, even at the low rate of \$2, had a marked effect in deflecting dive boats from coral reef areas subject to fees to nearby reefs located outside the fee-bounded areas. However, it is too soon to tell if fee hikes will affect the protected area revenues, as issues of seasonality have not been factored in yet.

Regarding education campaigns: In advance of the imposition of fees several meetings were held and notices posted. All dive boat operators regularly explain the fees to their customers.

Two other MPAs in the Egyptian Red Sea are charging an entrance fee: the Giftun Islands and the Offshore Islands.

Fiji

At the Ulunikoro Marine Reserve, dive operators pay \$50 per month, with revenues going to the reserve.

Finland

The Nordic countries of Norway, Sweden, and Finland have long had a strong tradition of open and free access to nature areas, whether publicly or privately owned. Nonetheless, the funding challenges facing other countries have also been an issue there. As noted by Ovaskainen, Horne, and Sievänen (1999:49) in the case of Finland:

the budget funding allotted to visitor services has become insufficient with the increased number of services provided. During the next few years, it has to be decided whether the basic recreation services on public lands can still be offered free of charge in the future — which might mean cutbacks in facilities — or whether they should be subject to a charge on the beneficiary-pays principle.

Sievänen and Ruuska (1997) also discuss the fee issue in Finland.

France

At Porquerolles Island NP, there is an underwater diving trail, and the park charges entry fees.

Guam

Guam does not charge fees at its 5 MPAs.

Honduras

At the Sandy Bay-West End Marine Reserve, there is no fee charged by the management agency, but an industry-organized Marine Users Association has begun charging divers a fee of \$1 per dive, with revenue used to fund management efforts outside of those conducted by the NGO officially responsible for management.

A fee system for the reserve has been proposed, with charges of \$7 for all visitors except island residents or children aged 5 and under. Seventy percent of the revenue would be earmarked for reserve management, while 30% would be earmarked for community development projects (alternative livelihoods, sanitation improvements etc.).

India

In October, 2000, entrance fees for foreign visitors at 20 World Heritage sites in the country were increased to \$10, from Rs. 10 (Indians still only pay Rs. 10, about 2% of the foreigner price). The fee increase apparently has generated much opposition, especially since it occurred "overnight" without advanced notice.⁴

Indonesia

At Bali Barat Marine Park, there is a proposed fee of Rp. 2,500 per visit (\$1 = Rp. 11,365 as of July 2001). Over 90% of visitors to this MPA are from developed countries. Legally, NP fees in Indonesia are based on national regulation and decided by the central government. The fees are equal for every area; they go to the central government to be re-distributed and to the district government. The fee has not been implemented yet, but so far little opposition has been voiced from the private sector. A pass will likely be distributed in exchange for a fee. The allocation of the monies to be collected is still being resolved.

At Bunaken Marine Park, the fee for foreign day-trippers (picnickers) and all Indonesians is Rp. 2,500. For other foreigners, including divers it is Rp. 75,000 (\$6.60) for a calendar-year pass. The fee is new, so industry attitudes are difficult to gauge, though there was some industry concern that the fee would be introduced without commensurate improvement in management. The local Marine Sport Association in the North Sulawesi introduced the idea of increasing the fees. In the first four months of operation there have not been any complaints about the fee, and no decrease of visitation recorded.

A local dive operator noted: "I've never had a guest complain about the fee; they support the initiative." There was no industry opposition, as the fee was obviously needed. Operators were trying to finance much needed patrols (mostly night patrols) to deter rampant bomb and cyanide fishing going on in the park at the time. Nonetheless, there remain two operators who refuse to pay.

It seems that the stronger opposition comes from district government. Indonesia is developing a decentralization system, so many of the districts have to increase their income, as the subsidies from the central government will be decreased significantly. On the other hand, every conservation area in Indonesia is basically still under the central government control. The district governments see fees as a good resource to raise income.

Fee allocation: 80% to the management board comprised of government, NGOs, local communities and dive operator association (for conservation and management activities such as

⁴http://www.oyeindia.com/drifter/the_daily_drifter/1190.html

patrols and education programs), 10% to the central government, and 10% to the district government. The district governments are still negotiating for a bigger proportion of the new fee.

Collection mechanism: For international tourists, same as Bonaire—a tag system, with a form filled out (name, country of origin and optional e-mail address), with one copy going to the guest, one to the operator and one to the board overseeing the funds. A day ticket/pass system is used for locals. Dive operators sell tags to divers, or they can be purchased at ticket kiosks in the harbor or on Bunaken Island. Local day trippers buy tickets at these kiosks. Leaflets and info sheets are widely available to show guests who question the fee.

Visitor surveys were conducted to evaluate willingness-to-pay (WTP) when establishing the fees. It was found that WTP is actually around \$20, but a decision was made to start with lower fees for a couple of reasons. First, the WTP assumed effective MPA management. As one person involved noted, "we want to demonstrate we can achieve real conservation management with smaller amounts of money before raising it to the higher level." Second, there was conflict over revenue sharing and distribution. By keeping fees low, there was less money to fight over, which made it easier to establish the system. Once effective management is in place, the fee can be increased. Fees are not intended to cover all management costs, and the park continues to rely on government for routine cost support, and also on public and private grant support.

There was relatively little advanced notice of the fees: six months preparation, two months advanced warning for implementation, 1.5 month testing period, and then implementation. However, this has not been a problem in terms of industry opposition.

Visitation continues to increase at Bunaken MPA. Fees have increased revenues, as well as broader interest by individuals and public and private donors (they're encouraged to see people working together to get the job done).

Education campaign: Broad public awareness campaigns targeting a range of stakeholders. Print and electronic media -- locally and internationally -- for general public. Signs, posters, etc. around the park explaining the user fee system and what it is for. Ranger-community patrols are also conducted to check tags and tickets and explain about the park.

At the Wakatobi Marine Park, a portion of the sole operator's revenue (\$5 per person/day) goes to the park. An official fee / badge system is planned for introduction in the near future.

At a recent (2001) workshop on tourism in Komodo National Park, participants agreed that entrance fees should be raised from its current low price of less than \$2.50 per visitor to finance park management. Most participants felt that a "marine usage fee" on top of, or parallel to the regular "gate entrance fee" would be acceptable. It was felt that transparency on how the raised entrance fees benefit park management is of the utmost importance to build acceptance among both operators and tourists.

Setiasih (2000) reports results of an open-ended contingent valuation study of snorkellers at Menjangan Island. Foreigners were willing to pay an additional Rp. 33,345 (\$2.90) on average if the money were to go to the park directly or an additional Rp. 4,955 if the money were to go to the government. Indonesians were willing to pay Rp. 18,904 and Rp. 2,816, respectively. The author used conjoint analysis to evaluate the tradeoffs between price, coral quality, and reduced crowding. Visitor WTP for a 1% increase in living coral cover was estimated at Rp. 1,629 and WTP for a decrease in each additional boat at the snorkel location Rp. 6,042.

Italy

At Miramare Marine Reserve, there is a fee of \$2.20 per day, with additional fees for specific activities: education program up to \$8/person, scuba diving \$22/person, snorkeling tour \$11/person. All Italian federal marine reserves feature some restrictions on diving, but each reserve is free to set its own regulations with regard to diving permits. Some authorities require dive centers to pay a fee and restrict market entry to those dive centers that existed at the time of the reserve's designation.

Miramare depends on the Italian Ministry of Environment but is managed by WWF Italy. There are two financing mechanisms: funding from the ministry (75%) and self-financing from activities such as educational activities, scuba diving tours, and snorkeling tours. There was no opposition to the fees as all activities inside the marine reserve are organized and run by the park staff (biologist and scuba diving guides). Private tour operator can reserve an activity for a group, but this activity is promoted and run by the reserve staff.

Fee revenues fund guides and cover part of the MPA expenses. The fees have not reduced the number of visitors; rather, there are managemerial limits on numbers.

Jamaica

At Montego Bay Marine Park, there currently are no fees. A user fee system has been proposed, but it is uncertain when / if it will begin. Surveys were conducted and it was shown that visitors were willing to pay to protect the environment. Some of the operators, especially at all-inclusive resorts, have expressed concern about the establishment of fees.

Kenya

Kenya has a long history of nature-based tourism and has long charged fees for access to its parks. The following is the fee schedule for Kenya Wildlife Service (KWS) parks and reserves, with fees varying across visitor groups (non-residents, non-citizen residents, and citizens) and across parks.

	Visitor Type		
	Non Residents	Kenya Residents	Kenya Citizens
Category	(US\$)	(Kshs)	(Kshs)
A: Aberdares, Amboseli, &			
Lake Nakuru			
Adults	27	500	100
Children (from 3 to 18 years)	10	50	50
Student and organized groups*	10	50	50
B: Tsavo East & Tsavo West			
Adults	23	200	100
Children	8	50	50
Student and organized groups	10	50	50
C: Nairobi, Shimba Hills &			
Meru			
Adults	20	150	100
Children	5	50	50
Student and organized groups	10	50	50
D: All other Parks			
Adults	15	100	100
Children	5	50	50
Student and organized groups	5	50	50
Mountaineering			
Adults	10	100	100
Children	5	50	50
Student and organized groups	5	100	50
Marine Parks			
Adults	5	100	100
Children	2	50	50
Student and organized groups	2	10	10

^{*} Includes students over 18 years and adults from educational, conservation and civic institutions.

Though Kenya is often viewed as a safari destination, the coast is actually the dominant destination in the country, with about 52% of the total hotel beds located on the coast. Indeed, 95% of visitors use the coast as a base for inland safaris. Marine parks and reserves include Malindi/Watamu, Mombasa, Kiunga, Mpunguti, and Kisite. Since November 1995, an experimental Beach Management Programme started in one area contiguous to Mombasa North Mainland park. Under this program, \$0.50 is charged per bed-night at beach hotels along this area, and revenues go to KWS (note: there is some indication that not all hotels have complied, and the current state of the program is uncertain). KWS security rangers in turn patrol the beach front to ensure visitor security and good conduct from beach operators. They also maintain beach cleanliness. Previously, and still running in other marine parks, payment was (is) made

directly to mobile marine rangers along the beach (in KWS uniform). Visitors can then negotiate with independent boat owners on the cost of a boat trip to the park's coral "gardens". Some hotels and tour operators buy park entry tickets in bulk (where applicable) which they in turn sell to tourists.

Malaysia

Malaysia charges an entrance fee of 5 ringgit (\$1.30) per adult (2.5 ringgit per child or pensioner) at each of the country's 40 marine parks, but apparently the fees are not always collected. Though a two-tiered system was considered, with higher fees for foreigners, it was rejected. The fee level apparently was not determined based on any studies of visitor willingness to pay, though more recent studies indicate that visitors are willing to pay much more than the actual fee. However, due to the legislative and administrative inertia, it is difficult to increase the fee amount.

Maldives

Apparently, there are no fees levied in Maldives for visiting any of the protected reefs, nor are there official marine parks. There have been attempts to create such a park in Addu atoll, the southernmost atoll of the Maldives.

Mexico

There has been a recent proposal for fees of 60 pesos (\$1 = 9.07 pesos as of July 2001), at "high demand" parks such as Bahía de Loreto, Arrecifes de Cozumel, Punta Cancún—Punta Nizuc, Isla Mujeres and Isla Contoy, and 30 pesos at "low demand" parks such as Puerto Morelos, Arrecifes Alacranes, Sistema Arrecifal Veracruzano, Bahías de Huatulco and Arrecifes Xcalak.⁵

Apparently, roughly half of the approximately 100 dive shops in Cozumel charge a small voluntary fee for Cozumel Marine Park (\$2 per diver and \$1 per snorkeler per day). Revenues are used by the park, but jointly administered by the MPA and dive shops. Accounts are audited every three months and printed in local newspapers.

According a local dive operator, under Mexican law there should be a fee for all national park visitors of 72 pesos per day. However, the federal government has not found a mechanism to charge foreigners as it is difficult to control park access. In addition, they have not found a way to earmark revenues back to parks, which would be critical for industry support. As a result, the association of operators of Cozumel, Cancun, Isla Mujeres, Playa del Carmen and the Riviera

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⁵ Nota informativa de Diana Teresa Pérez, tomada del diario La Crónica, 19 de abril de 2001, p. 19.

Maya have stated that they would not participate in such a program. They have also received support from the Secretary of Tourism to abolish the law.

Micronesia

The (Chuuk) Truk government levies a cruising tax of \$31.50 per person per week for liveaboards and a \$30 per person dive tax.

Mozambique

Cesar et al. (2001) describe the case of the Bazaruto Archipelago, Mozambique's only marine national park. In 1997, tour operators, the national park, and the integrated coastal management project agreed to collect \$5 from tourists entering the park. By 1998, \$10,000 had been raised, with revenues used to build schools and a health clinic, and to fund other community services.

Namibia

Barnes (1999) reports the results of visitor surveys conducted in Namibia. When asked about the entrance fee at Etosha National Park (N\$8, approx. US\$2.15), 3% considered it too high, 43% just right, and 54% too low. Noting that fees in Botswana are much higher (N\$66 per day), visitors were asked how they would respond to such a fee in Namibia. Twenty-four percent said they would no longer visit parks, 29% said it would not affect their visits, and 47% said it would shorten their stay, on averge reducing the number of days by half.

When asked what fee would be appropriate for Etosha, the average response was N\$38 (US\$10.25) for a one-time fee or N\$24 (US\$6.50) for a daily fee.

Nepal

Krakauer (1998:26-27)⁶ describes how increased fees and limitations on expedition numbers for climbing Mt. Everest in Nepal led to a shift from Nepal to Tibet, thereby leaving hundreds of sherpas out of work. However, the shift turned out to be caused by the limitations, rather than the fee. A further increase in the base fee from \$50,000 to \$70,000 per group did not seem to deter groups from Nepal.

Spergel (2001) reports that the country allows individual PAs to retain 50% or more of the entry fees they collect.

⁶ Krakauer, J. (1998) *Into Thin Air*. Anchor: New York.

Netherlands Antilles

Bonaire Marine Park and Saba Marine Park,⁷ both in the Netherlands Antilles, have long been examples of the role tourism can play in financing protected areas generally, and marine protected areas in particular.

Bonaire charges \$10 per diver per year as admission to the park, paid by both local and foreign divers. The fee was instituted in January 1992 and has remained unchanged. The park also charges additional fees, including for use of public yacht moorings. Fee revenue (\$270,000 annually) goes directly to the park, rather than the general treasury.

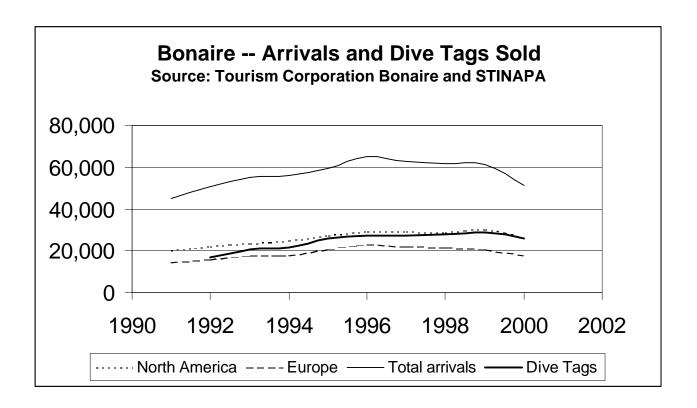
The fee is paid when divers check in at their resort, and the plastic tag they receive must be worn when they are diving. Spot checks are made on shore divers, but peer pressure to pay the fee ensures that checks are unnecessary on dive boats. The tag not only helps ensure compliance, but has also become something of a collector's item and status symbol. In fact, some visitors at Saba, which uses a different system, have said they'd also like to receive a tag.

The fee was opposed initially, and some dive operators threatened to go to the Cayman Islands instead if it was implemented. Despite this opposition, the fee was implemented, and it did not reduce visitation – indeed, it has helped attract divers since the revenue is used to manage and maintain reefs. The number of divers has increased from 19,500 in 1992 to 28,000 currently, and the management funded by fee revenue has ensured that fish populations have increased and the reefs remain pristine despite the large number of divers. The lack of diver response to the fee is consistent with the results of a survey of visitors prior to its introduction. Ninety-two percent of surveyed divers indicated a willingness to pay the proposed \$10 annual fee (Dixon, Scura, and van't Hof 1993). Moreover, 80% would be willing to pay a fee of \$20, 48% a fee of \$30, and 16% a fee of \$50.

The following figure shows arrivals to Bonaire from North America (US and Canada), Europe, and total, together with the number of tags sold at the marine park. Though there has been a recent decline in visitation, the figure illustrates that the implementation of the fee in January 1992 did not decrease arrivals.

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⁷http://www.sabapark.com/ and http://www.bmp.org/



Fee revenue covers 80% to 90% of the park's budget for expenses including management salaries, boats and vehicles, mooring maintenance, outreach materials, and law enforcement. On the neighboring island of Saba, revenue is also used for conservation activities, including research and monitoring, ranger salaries, and provision of an orientation session on rules and regulations for all divers. In Bonaire, there are more than 70 moorings for use by dive boats, while in Saba there are 41.

At Saba, foreigners are charged \$3.00 per dive (\$3.00 per week for snorkelers), which is added on by the operators. Given an average of 10 dives per visit, the typical diver pays \$30 overall. Residents are not charged, as they are a small user group. An honor system is used at Saba, but it is also easy to check compliance as there is only one access point for SCUBA divers. As with Bonaire, there is no indication that the fee has affected visitation levels.

In both parks, operators are legally required to collect the fees, and failure to do so can lead to suspension or revocation of permits. At Saba, operators transfer the fees to the park management agency (an NGO) on a monthly basis, while on Bonaire operators purchase ticket books up front from the park management agency (also an NGO). Despite the regulations, there appears to be some "recycling" of tags at Bonaire, in which divers or dive operators pass old tags to new arrivals for their use. However, the unique numbering of each tag and the registration of visitor name and address at the time of tag purchase helps to reduce this problem. In addition, the industry is generally supportive of the system, and the fee is modest enough that individuals have relatively little incentive to make the effort to recycle tags.

These parks also illustrate how fee systems can include information gathering that is useful for management. For example, at Saba, operators also report visitor statistics and the number of dives per dive site.

Saba also serves as an example of supplementing entrance fee revenue with revenue from other tourism-related sources. The park sells t-shirts, embroidered polo-shirts, caps and books, with sales generating around 18 % of the budget. Donations are also accepted via the Friends of the Saba Conservation Foundation, and an arrangement with a U.S. conservation organization enables donations from U.S. taxpayers to be tax-deductible.

At St. Eustatius Marine Park, the fee originally was \$3 per dive or \$35 for a year pass. Due to non-compliance, they changed the system to follow the Bonaire model. The charge is \$12/year for a tag and \$10/night for yacht fee. That park has installed 30 dive moorings and 13 yacht moorings.

New Zealand

As described in WCPA (2000), the Department of Conservation, which manages all public natural areas in the country, is not allowed to charge entry fees. However, it is allowed to charge for the provision of facilities and services, as well as the issue of concessions and permits. Revenue from such sources is approximately NZ\$11 million per year. The department is able to retain all revenue raised from external (i.e., non-governmental) sources, which is an incentive for maximizing revenue generation and cost recovery.

Palau

Palau charges a diving fee of \$15 per person which raises \$1million/year—enough to pay for all the costs of the marine protected areas (reports differ as to whether this fee is for the whole country or only the state of Koror (location of the best dive sites) and whether it covers 7 days, 15 days, a month, or a year). Revenues have been used to install mooring buoys at most of the dive sites, install self-composting toilets on all the beaches open to visitors, hire a crew of "beach boys" to service the toilets and clean all the beaches, install interpretive signs where appropriate, and fund marine rangers.

The fee is collected by operators, and anyone caught diving without having paid the fee is subject to a \$1,000 fine.

Apparently, imposition of fees for various activities, and by various states, is proliferating, so the national government is in the process of reviewing the entire permit/fee system with a view to introducing a single fee to be collected at the airport upon arrival and disbursed accordingly / proportionally to the various states.

There is also a cruising tax of \$35 US per person per week for live-aboards.

Papua New Guinea

Apparently, there are no standard fees, nor many functional MPAs. Individual dive operators have fee structures worked out with local communities, and efforts to standardize the fee nationally are met with resistance from operators due to the difficulty of adjusting to new fees (lack of advance notification). Revenues go to local communities/resource owners. There is no governmental guidance - each local area is its own government as far as resource use is concerned. Since fee are a small percentage of a diver's trip costs, it is not felt that an increase would reduce visitation.

At Milne Bay Community Marine Reserve, a dive fee system was implemented in June 2001. A fee of K3 (approx. \$1) per diver/per dive site/per day will be assessed on PNG registered dive boats and a fee of K10 per diver/per dive site/per day will be assessed on non-PNG registered dive boats. For example, a PNG registered dive boat that carried 10 divers and visited 3 dive sites over the course of one day will be assessed a total fee of K90 for access to those resources during that day. The K3 per diver/per dive site/per day fee is an increase of K1 over similar systems operating in PNG.

It was agreed that the dive fee system, in particular the K3/K10 fee structure, would be reviewed one year after its implementation. In the interim, a "willingness to pay" study of divers visiting MBP will be conducted in cooperation with dive boat operators. The results of this research will be presented in June 2002 and form the basis for an evaluation of the fee structure. Holtz and Callister provide an overview of the system.⁸

Philippines

Fees are charged at many MPAs in the Philippines, with amounts varying from \$1 to \$50. Most local MPAs, which are legislated under municipal government, charge \$1 to \$2 per entry. Foreign visitors at the Tubbataha Reefs National Marine Park pay \$50 (an amount that was determined from results of a survey during the 1999 dive season).

Fee levels vary across different types of users and uses, including locals, foreigners, divers, snorkelers and photographers. For example, at Tubbataha, the 1,500 foreigners per year pay \$50, while the 500 Filipinos pay \$25—the combined result is \$87,500 in revenue that goes toward the conservation of the reef.

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⁸ Christopher Holtz and Peter Callister. January 2001. Community Based Coastal & Marine Conservation In Milne Bay Province, Papua New Guinea. Conservation International: Washington, DC.

Visitors typically pay fees directly, but if they are on a package tour, the operator normally arranges payment. Because most MPAs in the Philippines are legislated under municipal ordinance, revenue tends to stay with local government, and revenue generally is used to help manage the MPAs. At MPAs with good management and reputation, fees have led to an increase in numbers. However, in other cases, fees have led to a decrease in numbers.

At Gilutungan Marine Sanctuary in Cebu, there is a charge of P50/day/person for foreigners and P25/day/derson for Filipinos (\$1 = P53 as of July 2001). There is a charge of P1,000/year for boar operators that carry divers and snorkelers. Visitation is relatively low, at 400 per month in peak season.

White, Vogt, and Arin (2000) report that contingent valuation surveys indicate willingness to pay entry fees at three popular diving areas in the Philippines at \$3.27 to \$5.34 per day.

Seychelles

Cesar et al. (2001) report that five of the most important MPAs in Seychelles earned more than \$650,000 in entry fees in 1995. They also report results from a survey of diver willingness-to-pay in that country. Average WTP was 61 Rp. (\$12), which was \$2 more than the fee at the time (50 Rp.). However, when the fee was increased, many divers switched to similar sites outside the park, which led to a reduction in revenue for the marine park authority, rather than an increase.

South Africa

As described in WCPA (2000), the KwaZulu-Natal Nature Conservation Service, which is responsible for managing natural areas in that province, derives substantial funding from entry fees and other tourism-related revenue (e.g., accommodation, food, tours). Entry fees vary across parks, but are approximately R9 (\$1.10) per person per day. Combined tourism revenue in 1999 was R76.5 million, which represented 29% of the agency's total income. The net contribution, after deducting direct expenditure associated with tourism operations, was R21.3 million.

St. Lucia

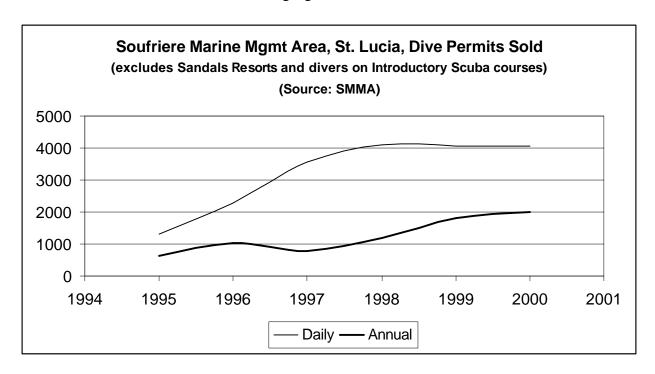
At the Soufriere Marine Management Authority, there are fees of \$4/day or \$12/year for divers and \$1/day for snorkelers (on commercial tours). There are also the following vessel fees:

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⁹ http://www.smma.org.lc

	Length of Stay		
Size of Vessel	Up to 2 days	2 days to 1 week	
Class 1 (up to 35 feet)	\$10	\$15	
Class 2 (between 35 and 65 feet)	\$15	\$20	
Class 3 (more than 65 feet)	\$20	\$25	

There is a ticket/tag system, with rangers collecting yacht fees and operators collecting dive/snorkel fees. Three months notice is provided for fee increases. Though there has been some opposition to the (new) snorkeling fee, because operators do not yet see where the money is going, support for fees has increased due to positive customer feedback. There has been an increase in diver numbers, as the management that fee revenue facilitates helps to attract divers. This increase is illustrated in the following figure.



At Pigeon Island National Historic Park, Geoghegan (1998) reports that the entrance fee is \$4 for foreigners and \$2 for residents, which raised over \$175,000 in the 1997 fiscal year.

Suriname

At the Galibi Nature Reserve, there is a charge of \$1/day for day visitors. Fees for overnight visitors are included in the lodging tariff. There is discussion of doubling the fee next year.

Some tour-operators complained about the fee, but education and awareness activities have resulted in more cooperation with the operators and local communities. No decline in MPA visitation or revenues has been experienced.

Tanzania

At Mafia Island Marine Park, the fee varies with nationality, age and activity. The following is the current fee schedule, but the law has been revised and new rates (not yet determined) will come into effect in January 2002.

	Tanzanians	Non-Tanzanians	Expatriate Residents
Entry			
Adults (16 years old or older)	T Shs.1000	\$10	T Shs.2500.00
Between the age of 5 and 16 years	T Shs.200	\$3	T Shs.300
Children below the age of 5 years	Free	Free	Free
Scuba Diving	TShs 1000	\$5	\$2.50
Filming	\$100	\$100	\$100
Reef watching	TShs 1000	\$ 5	\$2.50
(e.g., use of glass-bottomed boat)			
Permit for landing of crafts	Private	Commercial	
Local registered leisure boat	TShs 1000	TShs 5000	
Foreign registered leisure boat	\$10	\$40	

In addition, there is an accommodation tax of 10 per cent for hotels and lodges within marine parks or reserves.

As with Mafia Island, fees at Bongoyo, Mbudya, Fungu Yasini, Pangavini and Maziwi Island Marine Reserves will change in January 2002. Currently, all visitors to these reserves pay the following fees:

- ! Overseas Visitors \$10 (or Tshs.8000).
- ! Tanzania Nationals/Resident Expatriates 500Tshs.
- ! Person below the age of 16 years Free.
- ! Local registered boat Private Tshs 1000 Commercial Tshs 5000.
- ! Foreign registered boat Private \$10 Commercial \$40

Fees for the service of an official guide for a group of five people maximum are \$5 per person per day. Fees cover a visit within a reserve for a day only—the permit/ticket is valid for the date, activity and at that particular reserve shown on the ticket. All revenues are retained in the Marine Parks and Reserves Conservation and Development Fund (CDTF). Funds are used to support routine marine reserves operations and maintenance, including local community development projects and patrolling against illegal activities.

As the marine reserves illustrate, Tanzania charges a combination of fees, with visitors often having to pay more than one. Spergel (2001) provides the terrestrial example of national park visitors having to pay separate camping, firewood, and photography fees in addition to a \$25 per day entry fee.

Thailand

Thailand charges a fee of 200 baht for foreigners and 20 baht for locals in all national parks (\$1 = 45.5 baht at July 2001). Approximately 18 months ago, the fees were increased to their current levels from 20 baht (foreigners) and 10 baht (thais), and the industry opposed the increase, primarly because they had already published rates for the following season (i.e., lack of advance notification). The government gave one month lead time to the implementation of the new fees.

Fees are collected and vouchers issued by the national park headquarters. There is anecdotal indications that the fee increase has lead to a decrease in park visitation, particularly amongst foreigners at smaller parks. For larger parks, with organized tours the fees remain only a small proportion of the total tour price, and the cost has been absorbed by the operator. Apparently, there were educational efforts associated with the fees.

Trinidad and Tobago

At the Tobago Cays Marine Park, there are proposed fees of \$5/person/night for yachts and \$2.50/person/day for charter visitors. There will be no charge for nationals to enter the park. The fees are based in part on the amount of time and resources necessary to manage the respective groups. For example, crewed charter yachts that frequent the area tend to have a higher ratio of crew to passenger, and are more inclined to assist in management and protection initiatives. A bareboat charter from outside the state tends to have much less experienced crews and is much less familiar with the area, and therefore is a greater burden on management.

There is some industry opposition / confusion regarding the implementation fees, with various suggestions for alternative systems. However, there seems to be consensus that the proposed system is the best and fairest approach. The intention is to provide at least 6 months of advanced notification and to have fee implementation coincide with the high season of the following year.

Fee collection mechanism and allocation: the current proposal is to use a ticket system for yachts (ticket purchased at authorized merchants, one per person, allows an overnight stay). Day charters will be charged via a weekly tracking of their passengers and a direct payment to the park by the tour operator. The proposal is for fees to be deposited into a separate account of the Marine Parks Board, with funds drawn for operation of the park and education initiatives.

Education campaign: At present, the proposal is to inform users by correspondence as a primary step. Closer to implementation, information will be displayed at points of entry to the country, via the internet, etc.

Turks and Caicos Islands

As noted by Rudd et al. (2000), protected areas in the Turks and Caicos are funded by a 1% value-added tax on hotel accommodation and meals (in 1998, the accommodation tax was increased from 8% to 9% for this purpose). Revenue for 2000 is estimated at approximately \$550,000, but this is less than is needed to finance the management of all TCI MPAs. There are no entry fees at the MPAs. Results from visitor surveys conducted in the islands are reported in the Overview document and in Rudd et al. (2000).

United Kingdom

Though it is now somewhat dated, Bovaird, Tricker, and Stoakes (1984) reviewed pricing policies in the UK and evaluated price responsiveness at selected natural areas there. Overall, they found that visitors were not very price responsive.

United States

As noted in the Overview document, federal land management agencies in the US have undertaken a "Recreational Fee Demonstration Project" that involved substantial fee increases and implementation of new fees. This has led to substantial revenue gains with no apparent effect on visitation, even though fees were often doubled to levels as high as \$20 per vehicle. However, there are also annual passes and other mechanisms for reducing the effect of fees.

Fees vary widely across parks and types of charges. As an example, Yellowstone National Park in the US charges the following entrance fees, as of April 2001:

- ! Private, non-commercial vehicle: \$20 for 7 days or \$40 annual.
- ! Individual (e.g., hike or bicycle): \$10 for 7 days or \$40 annual.
- ! Snowmobile or motorcycle: \$15 for 7 days or \$40 annual.
- ! Commercial vehicle: per-entry, rates vary by type of vehicle from \$25 and \$10 per person for a sedan to \$300 for a motorcoach (bus).

However, visitors can purchase a \$50 annual pass that allows entry to all national parks. Fee details for all the national parks is provided at: http://165.83.219.77/parksearch/alphabetical/parklist2.cfm

Annuals reports on the fee demonstration project are available at: http://www.doi.gov/nrl/Recfees/RECFEESHOME.html

In the MPA context, a well-known example is Haunama Bay on the island of Oahu in the state of Hawaii. The park, which is managed by local government, is free to state residents but costs \$3 for others. The fee previously was higher, but was reduced since revenue exceeded expectations. All revenue goes into a special fund for administering the park, including funding for creating a new education center where marine and MPA management-related displays will be located.

There are approximately 1.2 million visitors per year. Due to concerns about visitor impact on the environment and the experience of other visitors, the number of visitors allowed in the park is limited by a specified number of parking places and by closing the park to all visitors on Tuesdays.

There are no entrance fees at the Channel Islands National (Marine) Park in California. Annual visitation to the park's mainland visitor center is 300,000, with visitation to the islands of about 30,000 and another 60,000 who only go into park waters.

Vietnam

No fees are charged at marine parks such as Cat Ba, Con Dao, and Phu Quoc. Lindsey and Holmes (2001) report on a survey of visitors at Nha Trang Bay, reportedly Vietnam's first marine protected area (other sources note that Hon Mun is the first MPA, launched June 2001). Tourism fees have been identified as the key element of a sustainable financing strategy, but survey results indicate only a modest willingness to pay fees, with average foreign visitor WTP of \$1.48 and average domestic visitor WTP of \$0.51.

Western Samoa

At Palolo Deep Marine Reserve, near Apia, as of July 2000 visitors were charged 2 tala (\$0.70).

Zimbabwe

As reported by Travel Now,¹⁰ in 1999 Zimbabwe planned to increase its entrance fees at national parks from \$5 to \$20 per day, with revenue going directly to the parks themselves rather than central government. However, industry appeals and public outcry due to the lack of advance warning led the government to reduce the fee to \$10, with a new fee structure planned as of early 2000.

¹⁰http://www.travelnow.co.za, stories from 2 August and 28 September 1999.

Africa – Various

The following table is from Krug (1999) and presents fees charged in various African countries. Wilkie and Carpenter (1999b) present trophy hunting fees for various animals in a range of African countries.

Daily entry fees for African protected areas in November 1998 (in US\$)*

Country	Non-residents	Non-national residents	Citizens	Fee for a car (once per entry)**
Eastern Africa				
Kenya	15; 20; 23; 27 [5 ¹⁾]	1.7; 2.6; 3.4; 4.3 [1.7 ¹⁾]	1.7 [1.7 ¹⁾]	L&F 3.5
Malawi	15	?	?	F 15 per day
Tanzania	$15; 25 \ [50^{2)}; 100^{3)}]$	$15; 25 \ [20^{2)}; 40^{3)}]$	1.5; 2.2 [2.2 ²); 2.2 ³)	L 1.5, F 30 <u>per</u> <u>day</u>
Uganda	7; 15 [175 ⁴); 250 ⁵)]	$3.6; 7.3 \ [150^{4}; 180^{5}]$	$1.5 \ [40^{4}; 50^{5}]$	L 3.7, F 20
Southern Africa				
Botswana	11.5	2.3	0.5	L 0.5, F 2.3
Namibia ⁶⁾	2.2; 4.4; 6.6	2.2; 4.4; 6.6	1.1; 2.2; 3.3	L&F 2.2
South Africa (once	per entry):			
- Kwazulu-N. NCS ⁷⁾	1.5	1.5	1.5	L&F 6.6
- SA National Parks ⁸⁾	1.8; 2.7; 6.6; 8	1.8; 2.7; 6.6; 8	1.8; 2.7; 6.6; 8	L&F 5.3
Zambia	15; 20	2	2	L 5; F 10
Zimbabwe ⁹⁾	5	5	0.3	L&F 0.3

Notes:

- * Entry fees for adult visitors on a privately organised safari (some countries offer commercial tour operators price reductions for their clients)
 - Several entry fees are reported for countries with a multiple park pricing policy
 - Fees in local currency are converted at November 1998 exchange rates
- ** L = locally registered vehicle, F = foreign registered vehicle
- 1) Marine Parks
- 2) Mahale NP
- 3) Chimpanzee trekking in Gombe Stream NP
- 4) Gorilla trekking in Mgahinga Gorilla NP
- 5) Gorilla trekking in Bwindi Impenetrable NP (lower fees are charged for stand-by tickets).
- 6) 'Day visitors' pay the entry fee for each day entering a park. 'Overnight visitors' pay no entry fee. However, without them knowing it, daily entry fees are included in the accommodation charges (1997 exchange rate).
- 7) <u>Kwazulu-Natal Nature Conservation Service</u>: On top of the entry fee, visitors to protected areas in Kwazulu-Natal have to pay a community levy. Depending on the site, this levy ranges from \$0.2 \$2.2 per entry and is used to support development in neighbouring communities. (1997 exchange rate)
- 8) <u>South African National Parks:</u> 'Day visitors' pay the entry fee for each day entering a park. 'Overnight visitors' to Kruger NP, Kalahari Gemsbok NP and Richtersveld NP pay the entry fee only once when entering a park. At all other parks 'overnight visitors' pay no entry fee (1997 exchange rate).
- 9) Visitors have also the option to pay an entry fee covering a period of seven days. This weekly fee is \$10 for foreigners and \$0.6 for citizens.

Willingness to Pay estimates – Various

The following table is expanded from Lindberg and Aylward (1999) and summarizes several studies of consumer net willingness-to-pay for foreigners at developing country natural areas. These are the estimated amounts that visitors, on average, would be willing to pay above and beyond what they actually had to pay (if anything) at the time of the study. The two methods used to derive these estimates are the contingent valuation method (CVM) and the travel cost method (TCM).

Site/resource	Method	Mean WTP (US\$)	Sources and notes
Kenya	CVM (DC)	72/day	Moran (1994); several sites (not just park visitors); payment in increased tour cost.
Tarangire, Tanzania	CVM (PC)	36-49/day	Clark, Davenport, and Mkanga (1995).
Kenya	TCM	78-134/day	Brown, Swanson, and Ward (1994). Revenue-maximizing fee = \$84/day.
Kenya	CVM (OE/DC)	72-86/day	Brown, Swanson, and Ward (1994). Revenue-maximizing fee = \$90-\$330/day (TCM).
Lake Nakuru, Kenya	TCM	114-120/visit	Navrud and Mungatana (1994).
Lake Nakuru, Kenya	CVM	73/visit	Navrud and Mungatana (1994).
Beza, Madagascar	TCM	276-360/visit	Maille and Mendelsohn (1993).
Mantadia, Madagascar	CVM (DC)	61	Mercer, Kramer, and Sharma (1995); WTP for adding site to trip itinerary.
Botswana	CVM (PC)	300	Barnes (1998). WTP for Botswana portion of trip.
Monteverde, Costa Rica	TCM	1,150/visit	Menkhaus and Lober (1996).
Poás, Costa Rica	CVM (DC)	23	Schultz, Pinazzo, and Cifuentes (1998); WTP entrance fee for future visit to park with improved infrastructure/services.
Manuel Antonio, CR	CVM (DC)	14	Schultz, Pinazzo, and Cifuentes (1998); as above.

Notes: DC = dichotomous choice, PC = payment card, OE = open-ended, WTP ranges based on differences in functional form or other factors. Some TCM studies (e.g., Maille and Mendelsohn; Menkhaus and Lober) focused on specific sites, but estimates were generalized to the country as a whole due to the multiple destination problem in TCM.