

Protected Area Visitor Fees

Summary

By Kreg Lindberg and Elizabeth Halpenny

6 August 2001 Version

The first author can be contacted at:

Cooperative Research Centre for Sustainable Tourism
Griffith University, PMB 50
Gold Coast, Qld 9726 AUSTRALIA

Telephone +61 7 5552 8129
Fax +61 7 5552 8507
Email k.lindberg@mailbox.gu.edu.au

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The documents are based on a combination of published and unpublished papers, as well as "personal communication" with site managers, tour operators, environmental NGOs, and others.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!

Introduction

This paper presents a summary of key findings from the Overview and Country Review, including a tabular summary at the end. Because of the project focus, the Belizean context is presented here and issues relevant to Belize are noted. 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. 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.

It should be stressed that Belize is not unusual in this regard. Though systematic data is lacking, funding difficulties are a problem for many parks around the world, and particularly for marine protected areas. As noted by the World Wildlife Fund (WWF),¹ most MPAs are “under-resourced and poorly managed, offering little in the way of real protection. Global estimates suggest that as many as 70-80% of the MPAs that have been established worldwide are protected in name only and are not actively managed at all” – that is, they are “paper parks.”

Two Belizean MPAs, Hol Chan Marine Reserve and Half Moon Caye Natural Monument, currently charge fees (\$2.50 and \$5.00, respectively). Fee revenues go to the respective management agency and cover a portion of management costs. In an effort to increase revenue available for MPA management, the Fisheries Department has proposed a "Marine Protected Areas Network Initiative" (MPANI) that includes fees for zone-oriented passes covering all the department's marine reserves. Areas outside Fisheries Department jurisdiction, such as Half Moon, also have considered raising existing fees and/or implementing new fees.

The following summary, together with results of the visitor survey conducted by TIES/PFB, is intended to facilitate effective decisions regarding new fee systems in Belize. It was not possible to obtain information from all MPAs, which should be kept in mind when reading the following. Nonetheless, it is based on what appears to be the most extensive review conducted to date.

What fees are charged at MPAs?

There is substantial variability in fees at MPAs, with many charging no fee at all and some charging quite high fees—\$105 at Cocos Island in Costa Rica, \$100 at the Galápagos in Ecuador, and \$50 at Tubataha in the Philippines. The most common fee levels are \$1 to \$5 per day or \$10 to \$30 per year. It is common for a combination of fees to be charged, such as a fee for general park entry and a fee for diving, or a fee per person and a fee per vessel.

¹<http://www.panda.org/endangeredseas/mpa/>. Van't Hof (1996) reports that 75% of the 130 coastal and marine parks in the wider Caribbean are “paper parks.”

Feedback obtained during the review indicates that fees are rarely based on systematic research (such as evaluations of fees charged elsewhere or surveys of visitors). Rather, they are typically based on anecdotal knowledge of willingness-to-pay or simply selection of an arbitrary amount.

At terrestrial parks, fees are often collected at the point of entry. At marine parks, the number of access points can be essentially unlimited, so alternative systems are typically used. At many MPAs, operators are responsible for collecting fees from visitors, and then passing revenue to the relevant agency. For example, in Bonaire (Netherlands Antilles), visitors purchase a tag when they check in to their resort. These tags are then attached to the divers' BC vests. In Bonaire, operators pay the agency in advance for the tags, while at Saba operators pay the agency based on actual visitors during the month.

However, in other locations park staff collect the fee. At Hol Chan (Belize), there is one main dive/snorkel location, and rangers collect fees there. At Hanauma Bay (US), the dive/snorkel location is immediately offshore, so access is controlled in the usual terrestrial manner, with payment at an entry gate.

The most appropriate payment mechanism depends on several considerations, including the type of fee charged (e.g., daily vs. annual), the type of usage (concentrated at few locations or dispersed), and the ability to enforce payments by visitors and operators.

On what basis do fees vary?

In principle, one can vary prices based on the quality of the visitor resource and the willingness of market segments to pay, just as prices vary across different products in more traditional markets, such as automobiles. Differential pricing based on resource quality and/or associated levels of visitation is practiced in some terrestrial systems, including the US National Park Service and Kenya Wildlife Service reserves. For example, non-resident fees for terrestrial parks in Kenya range from \$15 to \$27. Interestingly, Kenya's marine parks charge only \$5. In the Philippines, there is variation in pricing across parks—most charge low fees, but Tubbataha charges \$50. However, this variation is apparently due to the existence of multiple management agencies rather than a single agency's policy of differential pricing across reserves.

It is common for marine parks to charge different fees for foreigners than for nationals. Indeed, such two-tiered pricing may be more common in marine parks than in terrestrial parks. For example, in Belize foreigners pay \$2.50 at Hol Chan and \$5 at Half Moon Caye, but Belizeans are not charged. In Egypt, foreigners at Ras Mohammed pay \$5, while Egyptians pay \$1.20. There are various political, economic, and managerial reasons for such a policy. As noted by one source in the context of Bunaken Marine Park in Indonesia, foreigners pay approximately \$7 while locals pay about \$0.25. The goal is to raise revenue from foreign divers while subsidizing local day-trippers. Both groups pay, but locals pay much less in order to encourage greater interest in conservation and national parks.

In addition, some parks differentiate between divers and snorkelers. For example, a dive tour at Miramare MR in Italy costs \$22, while a snorkel tour costs \$11. In Saba, Netherlands Antilles, divers pay \$3 per dive while snorkelers pay \$3 per week. In this case, the focus is not so much

on difference in resource quality as in wealth and willingness-to-pay (WTP). Though formal evaluations of WTP across these groups are lacking, anecdotal information indicates that divers are wealthier than snorkelers, and that diving is a more specialized experience. Therefore, one would expect greater WTP by divers than snorkelers, and differential fees allow one to better capture this in the form of agency revenue.

Focusing on the Belizean context and assuming a primary goal of substantially increasing revenue, the experience of other countries can provide important examples. A high flat fee, such as proposed in the MPANI zone pass, could discourage snorkelers more than divers for several reasons. First, divers may be wealthier, and thus more able to pay. Second, they engage in a more specialized and expensive activity (e.g., require more equipment), and thus have greater WTP for the opportunity. Third, they may stay longer, so a flat fee is spread over more days.

There are at least two ways to deal with this situation, and if one assumes that divers spend more days at MPAs than snorkelers do, they have the same effect. The first is to offer both a daily pass and an annual pass, which limits the total payment for those spending many days at MPAs. The second is to charge more for divers than for snorkelers. In both cases, the goal is to obtain relatively high revenue from divers, based on their WTP, while keeping fees for snorkelers/day visitors low enough so that they still visit.

An example of this comes from the Soufriere Marine Management Authority in St. Lucia, which charges divers \$4 per day or \$12 per year, and snorkelers \$1 per day. Belize has been considering much higher charges, of \$25 per zone per trip, so the St. Lucia numbers might be adjusted accordingly. For example, one option would be a fee of \$5 per day or \$25 per year. Initial survey results indicate that most snorkelers who come for a day or two would not be bothered by the daily fee, while most divers would not be bothered by such an annual fee.

Are fee revenues used for conservation?

An important issue is how fees are used – whether they go to the central government treasury or are retained by the park (or at least the agency as a whole) to fund conservation management. Such retention, often referred to as "earmarking," not only contributes to conservation, but also to acceptance of fees by visitors and the tourism industry. For example, a recent survey in the state of Tasmania, Australia, indicated that 86% of the public felt park fees were good if income is returned directly to the parks, but only 36% if income is retained by the state government treasury (ANZECC 2000). If fee revenues are used to hire local persons either as regular park staff or as contractors, then fees can also benefit local communities and engender their support.

Though the common focus is on earmarking to help manage and conserve the resource, revenue is often also used to develop and maintain services and facilities. As ANZECC (2000:3) notes in the Australian context, "client services and facilities were greatly improved where user-pays revenue was retained by parks services. Local retention of revenue was most commonly mentioned [by agencies] as the key factor in creating a positive cycle from revenue to better services and facilities to positive public attitude and back to increased revenue."

With respect to operator support, one source in the context of Bunaken Marine Park in Indonesia observed that "if industry sees the money going toward good conservation management, they will support it. If they see the money being spent for other purposes, they will, rightly, be against it." It should be stressed that industry support depends not simply on funding going to the park, but on its efficient and effective use by the park. Rudd et al. (2000:10) report that dive operators in the Turks and Caicos Islands were "very wary of any increases in dive price that might be caused by MPA user fees. Their caution stems from a wariness of the government's ability to actually transform MPA revenue into concrete actions to protect the reefs."

Anecdotally, it appears that earmarking is more common in MPAs than in terrestrial parks, perhaps because MPA fee systems are newer and thus less constrained by historical precedent. Though information on fee allocation was not available from all parks surveyed, almost all sites for which this information was available had partial or full earmarking of funds for conservation.

Have fees reduced visitation?

Opposition to fees, by the tourism industry or others, is often based on the concern that fees will reduce visitor numbers. It is a fundamental principle of economics (as well as common sense) that as the price of a product or service goes up, the number of people purchasing it will go down. However, the extent to which this occurs depends on several factors, including the quality of the site, the availability of substitutes, the extent of the price increase, and the income of visitors.

There have been very few systematic evaluations of price responsiveness at developing country parks, or at MPAs generally. However, anecdotal information indicates that implementation of fees at their current levels generally has not reduced visitation at MPAs. For example, at Bonaire the \$10 fee is believed to have increased visitation, rather than decreased it, as divers have been attracted by the well-managed reefs—with management being possible precisely because of the fee. Such lack of price responsiveness is consistent with more systematic evaluations from terrestrial sites. In other words, the willingness of visitors to pay for the dive/snorkel experience generally exceeds the fees that are being charged.

Nonetheless, a couple considerations should be kept in mind. First, visitors will respond more to price increases at some sites than at others. Sites that have close substitutes would be expected to be more affected by a price increase than sites without good substitutes. For example, a \$20 daily fee would probably have little effect on the number of visitors at the Blue Hole in Belize, as it is well-known and essentially unique. However, a \$20 daily fee at Hol Chan might lead operators to take visitors to other sites near San Pedro (since many of these areas are outside current reserves, there is no fee). At the Red Sea Marine Park in Egypt, even a modest \$2 fee led operators to shift to adjacent non-fee areas. In the Seychelles, an increase in the fee from \$10 to \$12 led to similar shifts, thereby reducing revenue rather than increasing it.

Relatedly, sites with more local use than foreigner use may be more affected by price increases, as locals may have lower income (and thus be price sensitive), as well as be more aware of potential substitutes.

Second, even modest decreases in visitation may be important to operators and local communities that benefit from tourism employment. For example, if a doubling of fees only reduced visitation by 20%, in economic terms this would not be very price responsive. In addition, the increase would still be financially beneficial for the park agency. However, it could cause substantial loss of business to tour operators and their employees.

For these reasons, price increases should be carefully managed. There is some indication that education helps reduce opposition to fees, as visitors may be more willing to pay fees if they know that revenue is used for conservation (as noted above). In addition, differences in price responsiveness across sites suggests that fees should be customized to the qualities of the sites and the characteristics of site visitors. Lastly, a phased approach may be appropriate, with relevant monitoring. For example, fees might be increased incrementally, with future increases being dependent on long-term visitation levels being maintained (fees can cause short-term decreases, so time should be allowed for visitors and operators to adjust to the new fees).

Have fees been opposed by the tourism industry?

As noted above, the industry has opposed fees due to concern that they would reduce the number of visitors (and thus business opportunities) and that they would not lead to a better-managed park. However, perhaps the most common reason for opposition is the lack of advance notice. Local operators often sell their tours through wholesalers and out-bound operators in source markets, with tours and prices set a year or more in advance. If fees change between the time the tour information is disseminated and the time the visitors arrive, the operator cannot pass along the additional cost. Although parks appear to be more aware of this concern than in the past, limited advance notification remains surprisingly common, with the result that the industry often opposes the fee, and in some cases blocks the increase.

For example, at the Great Barrier Reef in Australia, industry opposition led to a reduction in the fee increase and a slower introduction than intended. In 1996 it was decided to increase the "environmental maintenance charge" (fees for visitors on commercial tours) from AU\$1.00 to AU\$6.00. The industry strongly opposed the increase, and this led the government to back down—the EMC was increased to \$2 in January 1997 and then to \$4 (rather than \$6) in April 1998.

Though the amount of advance notification necessary for operators to pass along the price depends on the nature of the local industry and the timing of tour formulation and sales, it is recommended that 12-18 months notification be provided for substantial fee increases.

Notes

Blank cells indicate lack of information. All information relates to marine areas unless otherwise noted. Monetary figures are in US\$ equivalents and are rounded to the nearest 0.10. All fees are per person unless otherwise noted. At sites with multiple fees, some fee details are excluded. See Country Review for basis (e.g., in local currency) and for further detail. For example, at the Great Barrier Reef in Australia, the fee is only for commercial passengers. Since that is the primary focus of this evaluation, clarification is not presented here.

Country/Site	Fee and mechanism	Earmarked to park/agency?	Advance notification?	Opposition? (By tourism industry unless noted.)	Reduced visitation?
Australia , 12 MPAs managed by national government	None				
Australia , Great Barrier Reef MP	\$2 per day (max. \$6)	Yes, but via national treasury.	Not sufficient when increased in 1996.	Yes, due in part to lack of advance notice. Led to reduction in fee increase and phased introduction.	
Australia , MPAs and other parks managed by states	Varies. No fee at many sites. \$7.50 at Ningaloo MP.	Yes (Tasmania).	Yes, 12 months (Tasmania), 12-18 months (Western Australia).	Yes, due to lack of advanced notification in past, especially in case of Ningaloo MP (Western Australia). This slowed implementation of the increase. Greater opposition by local communities (Tasmania, Victoria).	Yes at some sites with predominantly local use (Tasmania).
Bahamas , Exuma Land and Sea Park	Private vessels: \$5/day. Charter vessels: for private charter, dive charter, kayak charter: \$1/foot/day. No charge for Bahamian vessels.				
Belize	Hol Chan MR: \$2.50. Half Moon Caye: \$5. In both cases, collected on site, Belizeans free.	Yes			No
Brazil , Abrolhos Marine NP and Fernando de Noronha MP	\$4.25 per day	Yes (to IBAMA, with 50% staying in parks)		Some due to concerns about local access.	No
British Virgin Islands	\$1 per day + mooring fees. Collected primarily by operators, with non-commercial visitors buying directly from the National				

Country/Site	Fee and mechanism	Earmarked to park/agency?	Advance notification?	Opposition? (By tourism industry unless noted.)	Reduced visitation?
	Parks Trust. Fee increases are being considered.				
Canada , Flowerpot Island, Fathom Five National MP	\$1.90 per day + annual dive fee of \$5.20. Concessions for children, pensioners, etc.				
Costa Rica , Cocos Island	\$105 per trip				
Costa Rica , general	\$6 for foreigners			In 1994, fees for foreigners were increased from \$1.60 to \$15. Industry opposition, due to size of increase and lack of advance notification, led to concessions for travel agencies and eventually to a reduction in the fee to \$6.	
Ecuador , Galapagos NP	\$100 for foreigners, \$6 for citizens.	Yes, 90%.			
Egypt , Ras Mohammed	\$5 for foreigners \$1.20 for Egyptians.	Yes, environmental fund under Ministry of Environment. Park is self-funded through fees.	Past – up to 6 months. Future – possibly 1 year for increases, 2 years for new fees.	Not usually	No
Egypt , Red Sea Marine Park	\$2 per day for divers and snorkelers. Will increase to \$5 by end 2001. Sold via operators.	Yes, Egyptian Environmental Trust Fund.	3 months	Some opposition, but industry willing to support if fee applied to all areas and if revenue used for conservation. Fee initially set at \$5 (to match Ras Mohammad), but industry lobbied to reduce to \$2.	Yes, even at \$2, caused operators to shift to non-fee areas nearby.
Guam	None				
Honduras , Sandy Bay-West End MR	\$1 per dive				
Indonesia , Bali Barat MP	Proposed \$0.20			None	
Indonesia , Bunaken MP	\$0.20 locals or day visit. \$6.60 per year divers. Tag system, modeled after Bonaire.	80% to park board (for conservation), 10% local govt, 10% national govt	6 month preparation, 2 month advance notification.	Yes, from local government (distribution of revenue). Industry supportive – on park board and see conservation benefits.	No

Country/Site	Fee and mechanism	Earmarked to park/agency?	Advance notification?	Opposition? (By tourism industry unless noted.)	Reduced visitation?
Indonesia , Komodo	Proposed to increase from current level of less than \$2.50				
Italy , Mirarmare MR	\$2.20 per day + fees for activities (scuba \$22, snorkeling \$11).	Yes		None – tours run by park, not private operators.	No
Jamaica , Montego Bay MP	None (fees have been proposed).				
Kenya	\$5 for foreigners. \$1 for Kenyans.	Yes			
Malaysia	\$1.30 adults \$0.65 children + pensioners.				
Mexico	Proposed nationally. Currently collected voluntarily at Cozumel MP (\$2 per diver, \$1 per snorkeler per day).	Yes, for current collection at Cozumel.		Operators set up voluntary system at Cozumel. Opposed to national fees because of effect on visitor numbers and lack of earmarking to parks. Opposition apparently has prevented implementation.	
Micronesia , Truk (Chuuk)	\$30 dive tax, \$31.50 per week cruising tax for live-aboards (both per person).				
Mozambique , Bazaruto Archipelago	\$5	To community projects.			
Netherlands Antilles , Bonaire	\$10 per year (same for locals and foreigners), tag purchased on resort check-in.	Yes, covers 80% to 90% of park budget.			No – has increased visitation as divers seek well managed reefs.
Netherlands Antilles , Saba	\$3 per dive, \$3 per week for snorkelers. Residents not charged. Operators collect and transfer to agency.				No
Netherlands Antilles , St. Eustatius	\$12 per year for dive tag (follows Bonaire system). \$10 per night for yachts.				
Palau	\$15 (time period unclear), collected by operators.	Yes, raises \$1 million per year, enough to cover all MPA costs.			
Papua New Guinea	Varies across sites. Paid by operator. At Milne Bay: \$1 per diver per	Paid to local communities/ resource		Opposed to increases due to lack of advance notification.	No

Country/Site	Fee and mechanism	Earmarked to park/agency?	Advance notification?	Opposition? (By tourism industry unless noted.)	Reduced visitation?
	site for local boats, \$3.30 for non-local boats.	owners.			
Philippines , Tubbataha	\$50 for foreigners. \$25 for Filipinos.	Yes, raises \$87,500 annually for conservation.			
Philippines , Gilutungan Marine Sanctuary	\$1 per day for foreigners. \$0.50 for Filipinos. Paid by operators.				
St. Lucia , Soufriere Marine Management Authority	Divers: \$4 per day or \$12 per year. Snorkelers: \$1 per day (commercial operators only). Operators collect these fees, rangers collect yacht fees.		3 months	Support has increased due to positive customer feedback.	No – numbers have increased.
Suriname , Galibi Nature Reserve	Day visitors: \$1 per day. Overnight visitors: included in lodging.			Some initial opposition, but not based on lack of advance notification.	No
Tanzania , Mafia Island	Foreigners: \$10 entry, \$5 diving per day.	Yes			
Thailand , general	Foreigners: \$4.40 Thais: \$0.40		One month	Yes, due to lack of notification.	Yes, amongst foreigners at smaller parks, but not amongst organized tours.
Trinidad and Tobago , Tobago Cayes MP	Proposed: \$5 for yachts (tix purchased locally). \$2.50 for charters (paid by operators).	Yes	Expect to provide 6 months notice.	Some, for various reasons, including advance notification.	
Turks and Caicos Islands	None, but parks financed by 1% VAT charge on restaurants and lodging.				
United States , Hanauma Bay	None for Hawaii residents. \$3 for non-residents.	Yes			
Vietnam	None				
Western Samoa , Palolo Deep Marine Reserve	\$0.70				