TOURISM IN PULAU SERIBU: THE SEARCH FOR SUSTAINABILITY

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Abstract: Tourism in the region of Pulau Seribu, Indonesia has doubled in the last seven years. As a result of this increase and haphazard development, impacts of this activity on the region and the marine park found there are now being felt. Based on observations made during field research in the summer of 1995, two areas where greater sustainability of tourism development/activities can be most easily achieved are through education and modification of tourism "type." Education of tourists can include approaches such as interpretation trails, marine ecology information sessions, and park signage. Modification of tourism "type" could involve changing the type of tourist sought as a visitor to Pulau Seribu, utilizing "greening" evaluations of tourism businesses in the region, and enforcing current laws and guidelines designed to protect the marine environment.

Keywords: tourism, coastal, marine, park, conservation, sustainability, management

During this presentation I will deal specifically with two areas in which I believe the most impact can be made in creating a more sustainable tourism in Pulau Seribu, a coastal region just North of Jakarta. These two themes originate from a very versatile article written by Dr. Richard Butler in 1991, titled "Tourism, Environment and Sustainable Development." In this article Dr. Butler suggested four possible solutions to reduce the pressure of tourism on an area. These are:

1. Reduce tourist numbers to a level which allows the environment, at once human, natural, and physical, to function without being under pressure, and to sustain itself;
2. Change the type of tourism;
3. Change the resource itself into a form that is more capable of withstanding the pressures of tourism, while still being attractive to tourists and maintaining a fair level of integrity and authenticity; and
4. Education of the tourist, the host, the entrepreneur, and the government, to reduce impacts and control development (Butler, 1991, p. 204).

Two of these, (1) changing the type of tourism, and (2) using education as a tool to promote change, will be the focus of my discussion here. From observations made in the field, I feel these two approaches are the most easily implemented in Pulau Seribu, and currently the most appropriate.

Pulau Seribu: Tourism and Conservation

When translated into English, Pulau Seribu means "Thousand Islands." In actual fact it is a grouping of just over 100 islands. All islands in this chain can be reached by speed boat within two hours. Approximately 70 of these islands, located furthest away from the pollution effects originating from the Javanese mainland, lie within a marine national park. This park represents one of the first attempts anywhere in the world to use zones as a method to manage user activities (a project first proposed in the early 1980s). The park which was established in 1982, it has now been granted "Marine National Park" status. In 1992 a zonation plan was finally agreed to by all parties associated with the park (Alder et al., 1994). Within one of these zones—the IUZ, or Intensive Use Zone—lie most of the tourism resorts which I will talk about in this presentation.

Visitors to Pulau Seribu have increased rapidly in the last 14 years. Interestingly, almost 70% of tourists to Pulau Seribu are Indonesian; the remaining 30% are foreigners, although certainly some of these are residents of Jakarta. The number of tourists visiting Pulau Seribu has more than doubled in the last seven years (1987-1994) (57%–44% for foreign tourists and 62% for domestic tourists) (Halpenny, 1995). Since little was known about visitors to the islands I conducted a survey of visitors during the summer of 1995 (this was in partial fulfillment for my Masters in Environmental Studies from York University). It was hoped that through increased understanding of who visitors are to Pulau Seribu, more informed decisions could be made about the management of tourists and tourism in the region. Listed below are some of the findings from this survey.

- Average age of respondent was 36 years old (15 was the youngest, 72 the oldest)
- 29% of respondents were recreationists, 70% were tourists
- 60% of respondents were domestic visitors, 40% were foreign (compared with a 70 - 30 ratio shown in tourist numbers to the islands collected by the local tourism ministry)
- 12% were SCUBA divers
- 41% were repeat visitors

Respondents’ overall satisfaction with the trip:
- 22% very high satisfaction,
- 50.5% moderately high satisfaction,
- 21% average satisfaction,
- 5% moderately low satisfaction
Top three preferred activities included:
- Nature Observation (24% of respondents),
- Swimming in the Ocean (21%),
- Snorkeling (17%)

Demographics:
- 77% of respondents were male, 22% were female
- 73% of foreign respondents were Western (not including Turkey)
- 27% were from Asian countries
- 72% had completed post-secondary education
- 27% had completed secondary school

Primary reason for visiting Pulau Seribu:
- 32% of respondents stated “spending time with family and friends,”
- 20% said “finding a quiet, relaxing place,”
- 8% stated “SCUBA diving,”
- 7% said “experience a sun, sand and sea holiday,”
- 25% said “other” factors such as fishing, or that they were on a company tour

Average length of stay among respondents was 1.5 nights (Halpenny, 1995).

Most of these statistics will have little interest to people not associated with management of tourism activities in the Pulau Seribu region. However, there are several lessons that we as managers and policy makers can take away from a survey like this. To expand on this point, let me return to the two themes that I promised to discuss—themes or approaches that should lead to a more sustainable tourism in Pulau Seribu, and other coastal regions like it.

Tourism and Tourist Type in Pulau Seribu

As is usually the case with coastal regions, tourism development Pulau Seribu occurred in a haphazard fashion, often without thought to the long term impacts to the environment or local communities. One of the greatest challenges now facing resource managers, conservationists and business owners in the region is creating a balance between tourism development and the marine environment. As alluded to earlier in this presentation, a key element in obtaining this balance, is to identify the “type” of tourism that occurs in the region, and determine if another type of tourism is desirable, as well as feasible.

One way to measure tourism type is accomplished by identifying who invests in the site and what control the government has over them. While foreign investment exists in Pulau Seribu (e.g., Japan Airlines’ partial ownership of Pulau Hantu Barat/Kecil), the greater problem of ownership comes from another form of external ownership—the majority of islands are owned or controlled by wealthy Jakartans or government departments. It is perhaps the management practices of the former that is so alarming—as little action has been taken in the past to curb the activities of these “external” owners and their impact on Pulau Seribu’s marine environment. Wealth and ties to power insulate owners from any punitive action.

Indonesia has an extensive set of environmental laws, but lacks the ability or desire to enforce them. Endemic corruption, apathy and ignorance can be three causes of this problem (Ritcher, 1993). If a positive relationship between tourism and conservation is to be achieved, policies such as Indonesia’s environmental impact assessment process, AMDAL, must be enforced. Misuses of Pulau Seribu’s natural environment, as seen in the “illegal” construction of a golf course on Bira Besar, cannot continue to happen.

The construction of a golf course on Pulau Bira Besar makes a good example of the complexities of environmental law enforcement in the Pulau Seribu region, and for Indonesia in general. A controversy has been simmering in the islands for the last three years. Television and print media have brought this issue to light, when in previous years it would have remained taboo. The course was constructed in 1993–94 without a building permit or an approved environmental assessment. The developer, PT Pulau Seribu Paradise cannot open the course without AMDAL approval (Jakarta Post, 1995) and Jakarta’s commission on environmental impacts has turned down the developer’s environmental assessment three times already. Payment of a fine (estimated by one source at 200 million rupiah or US$100,000) by the developer may not be enough to appease local groups (Kasus Lapangan Golf Pulau Bira Besar: Pengelolaanya, 1995; Jakarta Post, 1993). The lesson here is, no matter how well-crafted environmental laws and guidelines are, they will remain ineffective if willingness or ability to implement them does not exist. The confusion and ambiguity created by the ineffective implementation of coastal management policies damages efforts by conservationists and tourism businesses to implement the best strategies for achieving their goals. This brand of irresponsible tourism and recreation development must be eliminated if a positive relationship between tourism and the marine environment is to be achieved.

To create a new “type” of tourism several authors have discussed the “greening” of tourism. One example of this was put forward by Hawkes and Williams. They suggest eight themes which should be applied to ecotourism and other forms of tourism. These are:

1. **Efficiency**, for example in regard to re-use or recycling of waste or in the use of energy or resources.
2. Employment involvement, so that enthusiastic people can help to introduce more sustainable forms of practice into tourism operations.

3. Redefining success, for example by recognizing and promoting the idea that financial profit is not necessarily the fundamental driving-force in private business ventures in tourism.

4. Environmental education and interpretation, where that includes promoting the deep understanding and appreciation of cultural and ecological resources which are absolutely essential to wise environmental management and sustainable development.

5. Building alliances, for example involving government agencies, private businesses, resources managers, and citizens, thereby gaining access to a large pool of shared resources, information, expertise, and values.

6. Recognizing and dealing with trade-offs, for example, the transport of large numbers of tourists by jet aircraft, which consume large quantities of non-renewable fossil fuels and emit much pollution, has to be considered along with attempts to reduce vegetation change, pollution, or other effects, in any destination areas operated on a low-impact or ecotourism basis.

7. Code of ethics, i.e., the need to develop ethical guidelines which encompass environmental and social factors and are aimed at all parties involved in tourism, including the tourists themselves.

8. Monitoring and environmental assessment, where this refers to the need for all sectors of tourism to develop a means of monitoring the economic, social, and ecological, effects of their activities as a basis for improved planning, management, and decision-making. (Hawks and Williams, 1993; cited in Nelson, 1993)

This rather impressive list of factors makes an excellent checklist for indicators of sustainability. Unfortunately, not enough time is available to talk about each one, instead, I will discuss two approaches to measuring tourism activity—which may aid in understanding what type of tourism is desirable in Pulau Seribu.

An example of “green tourism” promotion may be found in the implementation of Pacific Asia Travel Association’s (PATA) “Green leaf Awards,” designed to promote “environmentally responsible tourism.” Travelers will be encouraged to support the businesses that have passed general and sector-specific self-assessment questionnaires. The Ecotourism Society’s “Green Evaluations” represent a second and perhaps more rigorous example. TES’ approach to Green Evaluations involves using consumers as on-site monitors, as they are the only group that is always present on a wide variety of tours, year-round. In a recent trial run of TES’ Green Evaluations consumers, enticed by the chance to win a trip to Ecuador, completed an eight page survey of their experience, covering topics such as:

- pre-departure information
- education and information provided while on the trip
- tour operator contributions to local conservation efforts
- environmental and social compatibility of accommodations
- what is being done to monitor the business’ impact (Cecil, 1995)

These are just a few examples of how tourism type can be evaluated, and perhaps changed. Another approach to modifying the type of tourism in an area often involves attracting a different kind of tourist.

Lindberg (1991) identifies four types of nature tourists. These include: (1) Hard-Core Nature Tourists, (2) Dedicated Nature Tourists, (3) Mainstream Nature Tourists, and (4) Casual Nature Tourists. Categories 2, 3, and 4 are all present in Pulau Seribu. The Dedicated Nature Tourist is a person who takes trips specifically to see protected areas and who wants to understand local natural and cultural history. Promotion of this type of tourist to Pulau Seribu would benefit conservation in the area, as they would demand and support activities that work to conserve social, cultural and natural characteristics of the region. Efforts to encourage this type of tourist should be undertaken—perhaps, for example, as research tours or birding tourism. A serious constraint does exist in promoting this type of tourism however, as the quality Pulau Seribu’s environment is decreasing rapidly.

The Mainstream Nature Tourist is an individual who visits a destination to take an unusual trip. Few people would call the “sun, sand and sea” tourism found in Pulau Seribu unusual, however, by introducing elements such as SCUBA diving courses, the experience can become highly unique. As this does happen occasionally in Pulau Seribu, there are a small and perhaps increasing number of tourists who fit this category. By diversifying the types of tourists who visit Pulau Seribu—tourism managers and businesses may elongate the life of their own industry through the diversification of their destination.

It seems, judging from responses given by visitors interviewed during the survey that I conducted, that a majority of respondents described their trip to Pulau Seribu as partaking in nature as an incidental part of the trip. Lindberg would call this group of visitors Casual Nature Tourists. While this last group of tourists may have little contact with the environment, they nevertheless can contribute to the erosion of coastal resources, (e.g., through waste generation). This group often lacks fundamental knowledge about the marine environment. Efforts to educate this group of tourists, about Pulau Seribu Marine National Park and its environment must be undertaken. An example of this was found on Pulau Ayer, where trees
on the island were identified with signs, to educate and entertain tourists as they explored the island. Similar examples can be found on Pulau Putri, where visitors can visit a "zoo" and an extensive aquarium facility. This environmental interpretation could be expanded—increasing the conservation awareness of visitors to the region. This brings us to the second recommendation made by Butler that I would like to address—education.

**Education**

Butler's last suggestion, education, could be vigorously applied in the Pulau Seribu area. Today I will only talk about educating the visitors of Pulau Seribu. However, there is also much work to be done in educating government officials, dive guides and other tourism personnel, local community members, etc.

Criticism has been leveled at the park information signs, which are located at Ancol Manna (the main entry point to the island from the mainland) and on the resort islands in the park. In a 1993 study of the region Cochrane recommended the signs be redesigned, stating the park's name is above eye level and the rules are explained in language too complex for lay persons (Cochrane, 1993). When I surveyed visitors to the islands to find out if they were aware of the park's existence and where they had learned of it, more than 50% stated they did not know of the park's existence. Of the 49.5% that did know of its presence, only 15% of this group learned of it from park signs (respondents from Pulau Ayer were included, even though the island lies outside the park and a sign is not present there). The most frequent response given as a source of information of the park's existence was the category "other," (friend was the most prevalent response in this category), and "media" (Halpenay, 1995). Awareness of the park is an important component in making visitors conscious of conservation efforts, and why they are necessary.

A final strategy for reaching a park's financial objectives through tourism is the development of marine ecology information sessions, designed in part, to entertain tourists who are staying the night on the islands. This is based on my experience attending a popular nightly slide show on reef ecology on the Belizean island of San Pedro. Through this slide show environmental education of visitors was converted into a source of income for a marine park nearby. From responses of the 103 visitors to Pulau Seribu that I surveyed, 77% said they would be interested in such an information session. Seventy-four percent of those interested stated they would be willing to pay an average of US$5.50 for the presentation (Halpenay, 1995).

These are just some of the areas where an improved relationship between tourism and conservation can be generated. It will fall to NGOs, conservation officers, government planners, community members, and tourism businesses in the Pulau Seribu region to act on these ideas to achieve a more sustainable form of tourism.

**References**


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JOINT MANAGEMENT OF MARINE PARKS IN AUSTRALIA: A COMMUNITY BASED PERSPECTIVE

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Abstract: 121,000 Aboriginal and Torres Strait Islander people live within 20 kilometres of the Australian coastline; this is nearly half of the indigenous population. Coastal land and marine estuarine resources continue to be of great cultural and economic importance to Aboriginal and Torres Strait Islander people. Aboriginal people currently have no role in fisheries management and Aboriginal participation in Australian marine park management has so far been limited to one Aboriginal member of the Great Barrier Reef Marine Park Consultative Committee.

The concerns and conflicts expressed by representatives of indigenous peoples relate to the lack of opportunities for involvement in decision making relating to Marine Parks. These concerns embrace a wide range of issues relating to the management of the resources of the coastal zone. Furthermore, they arise from perceptions of inadequate levels of participation by Aboriginal and Islander people in the management of what they regard as their traditional domains both on land and in the sea. Participation is seen to be inadequate in three respects: recognition of traditional ownership; joint management arrangements; and consultation procedures. Aboriginal communities are often expected to take an Euro-Australian approach to organising representation and operation within an Euro-Australian bureaucratic framework. If this approach is alien to the Aboriginal communities, then it must logically place them at a disadvantage in the process of negotiating Aboriginal rights and interests.

Aboriginal communities must therefore have the opportunities to present a position on joint management issues in a manner and setting that is culturally appropriate. Community studies operating from within Aboriginal communities can provide the mechanisms and techniques for achieving this by effectively transitioning issues for understanding across cultural barriers and produce both more effective management and better understanding.

Keywords: marine parks, Australia, Aboriginal community, joint management

Introduction

What modern civilisation has gained in knowledge, it has perhaps lost in sagacity. The Indigenous peoples of the world retain our collective evolutionary experience and insights which have slipped from our grasp. Yet these hold critical lessons for our future. Indigenous peoples are thus indispensable partners as we try to make a successful transition to a more secure and sustainable future on our precious planet

—Strong (1990)

With the increasing focus on marine parks within Australia and increasing recognition of Aboriginal communities’ involvement in managing these, there is a need to examine how management frameworks can be formulated that move away from the existing polarised views and perceptions of marine parks. Recent changes in the legal status of Aboriginal rights and ownership of marine areas have highlighted this.

Marine park management frameworks have to address joint management, and the facilitation of a cross-cultural flow of information will promote the development of the cross-cultural understanding that is vital to resolving issues within joint management.

The Aboriginal Land Grant (Jervis Bay Territory) Bill 1986 provided for the granting of "...indefeasable freehold title to the Wreck Bay Aboriginal community over an area of some 403 hectares in Jervis Bay Territory" (C of A, 1986). Jervis Bay National Park will thus become "...the first park outside the Northern Territory to be owned and managed by Aborigines [sic] in a lease-back arrangement with the Federal Government." (Carruthers and Cant, 1994:12) Under the lease-back agreement the government will pay an annual rent to the Wreck Bay community to ensure the area stays accessible to the public as a national park (Cook, 1994) as per the Northern Territory model.

In announcing the grant, the Commonwealth Government Minister for the Environment, Senator possession Faulkner, and Minister for Aboriginal Affairs, Mr. Tickner, criticised the State and Territory governments for not initiating similar arrangements with Aboriginal groups, as was recommended in the 1992 Royal Commission Into Aboriginal Deaths in Custody (RCIADIC) report. Mr.
Tickner was concerned that while all the States and Territories endorsed the report, none put it into practice, and said “The Commonwealth’s direct opportunities to advance this agenda are limited given the fact that most parks are under the control of State and Territory governments” (Carruthers and Cant, 1994:12). The Jervis Bay grant was seen to illustrate “…the Federal Government’s commitment to reconciliation, as the joint management of Jervis Bay could not have been achieved under Mabo legislation” (Carruthers and Cant, 1994:12).

Jervis Bay is one of 13 coastal and marine conservation areas administered by ANCA, but is one of only two coastal national parks under ANCA on the Australian mainland. Consequently, there is little more that the Commonwealth Government can do in this way towards furthering Aboriginal land claims, and in the absence of positive action from the State governments the onus will rest with conservation groups and Aboriginal communities and organisations.

The declaration of the Commonwealth National Park for Jervis Bay in 1992, and the subsequent announcement to grant the local Wreck Bay Aboriginal Community title to the park in 1994 (under a conditional lease-back joint management arrangement) has included Jervis Bay in a scenario that may see upwards of 30 National Parks in local Aboriginal ownership within the next few years (De Lacy, 1991). This ownership is currently accompanied by obligatory joint management arrangements with government agencies, under a model developed in the Northern Territory for the joint management of Uluru-Kata Tjuta and Kakadu National Parks. A feature of this model is the success arising from involvement of Aboriginal communities in consultation and management procedures and the eventual progression to genuine Aboriginal control of many of the issues affecting their communities.

Opportunities for Participation in Decision Making

*Torres Strait is one part of Australia in which indigenous people have a formal involvement in the management of commercial fishing. Aboriginal people currently have no such role in fisheries management and Aboriginal participation in Australian marine park management has so far been limited to one Aboriginal member of the Great Barrier Reef Marine Park Consultative Committee.*

—RAC (1992: xxvii)

The concerns and conflicts expressed by representatives of indigenous people fall into three interrelated categories. The first is the lack of opportunities for involvement in decision making relating to marine parks. The second arises from what indigenous people regard as inadequate responses from governments when administrative or legislative mechanisms have been established to involve them in such decision making. The third relates to the lack of financial, social and vocational benefits flowing to indigenous people from projects that commercially exploit what they regard as their resources.

The above concerns embrace a range of issues relating to marine park management and arise from perceptions of inadequate levels of participation by Aboriginal and Islander people in the management of what they regard as their traditional domains both on land and in the sea. “Participation is seen to be inadequate in three respects: recognition of traditional ownership; joint management arrangements; and consultation procedures” (RAC, 1992: xxvii). While this situation is beginning to be addressed—via the 1992 “Mabo” (Native Title) Ruling—there is a clear lack of techniques to facilitate effective participation and consultation. Aboriginal communities are often expected to take an Euro-Australian approach to organising representation and operation within an Euro-Australian bureaucratic framework. If this approach is alien to the Aboriginal communities, then it must logically place them at a disadvantage in the process of negotiating Aboriginal rights and interests.

Aboriginal communities must therefore have the opportunities to present a position on joint management issues in a manner and setting that is culturally appropriate. Community studies operating from within Aboriginal communities can provide the mechanism and techniques by effectively translating issues for understanding across cultural barriers. The three areas where participation is considered inadequate will be briefly addressed below.

A House of Commons Select Committee in 1837 found that the “native inhabitants of any land have an incontrovertible right to their own soil, a plain and sacred right.” (Pagan, 1994:8) However, the government persists in avoiding dealing with moral issues and restrains the discussion of land rights to questions of legality which obviously
disadvantages Aboriginal cultural perceptions of marine parks and their use.

Indigenous people are not asking for western-style ownership, as they don’t see their connection to the land and sea in terms of the western concept of ownership. Instead, they want ownership in terms of control. Ann Creek, a spokesperson for the Kaaaju clan on the Cape York Peninsula, expressed this sentiment, as she believes any negotiating must be done with legal advisors and anthropologists. She wants the right to sit on the boards of marine parks on Aboriginal land; the power to issue permits and the authority to say what is done with these lands; and Aboriginal people to be recognised as authorised officers of the Park.” (Creek, 1992:23)

Effective control is thus a central issue for Aborignes. But this is not the most crucial issue, as the exclusion of indigenous peoples from the mechanisms of control is symptomatic of a deeper problem within Euro-Australian society. Woenne-Green et al. reported (1992:8) “...the major issues for Aboriginal people did not so much involve the augmentation of their involvement in the control and management of the conservation estate, but rather involved the limitations placed on their involvement by prevailing public attitudes and political positions towards sharing power with Aboriginal people in decision-making about lands reserved as part of Australia’s national heritage.

Thus the public and politicians are being implicated in maintaining restrictionist policies at the social, cultural and economic expense of an indigenous minority group. There is currently much focus on questions of legality arising from various Aboriginal land claims around Australia. Given that the Mabo ruling has extinguished the Terra Nullius concept in legal terms, the imperative now is to accept the challenge to deal with the morality of the situation. This challenge is increasingly being met in legal spheres and must now be met in the social spheres where personal morality can achieve what many a law could not. “The nation and justice would be far better served, rather than facing a landslide of post-Mabo litigation, if the Federal cabinet would sit down with us and negotiate a treaty, something we sought long before the Mabo decision” (Dodson, in Cordell, 1993:11).

There is no question that Aboriginal participation in the management of protected areas (while vitally important) is subordinate to the basic issue of security of land tenure to those parts of the conservation estate that are of cultural significance to them. Without security of tenure based on the formal acknowledgment of Aboriginal rights, governments will continue to find it unnecessary or politically inconvenient to negotiate with aborigines on equal terms for the control and management of conservation areas (Nutting, 1994:30).

The security of land tenure for Aboriginal groups is effected by default. This is via the Commonwealth’s Racial Discrimination Act 1975, which “...prevents States and Territories treating native title less favourably than other forms of title” (Woenne-Green et al., 1992:13). Adding considerable weight to the case for moral responsibility is Recommendation 315 of the Royal Commission Into Aboriginal Deaths In Custody (RCIADIC). This calls for implementation of recommendations that would create an environment for equitable joint management of national parks in Western Australia. The 1992 High Court decision on native title (the “Mabo” case) is seen as groundbreaking in the fight for recognition of Aboriginal customary rights. The view expressed in an article by Wootten is that “Mabo is about people not real estate.” (Wootten, 1993:19) Accordingly, the focus of attention must be broadened to include sociological issues and sociological studies.

As has been witnessed in recent years by the emergence of literature titles such as “Competing Interests” (Woenne-Green et al, 1992), the conservationist principles of park management are often in conflict with Aboriginal culture (Horstmann, 1992). Whilst there are indications of that this situation is changing (Buta, 1994) the divergences between a Western environmental ethic and an Aboriginal land ethic are felt by some to be irreconcilable (De Lacy, 1991a). During negotiations over a proposed Northern Territory national park, traditional owners expressed their frustration as follows: “You want to look after that country, all right, we’ll look after it for you, you give us a spoon and we’ll spoon feed those lizards, but it’s our country and we want to live there” (Figgis, 1986:28).

On another level, judging from Kakadu and Uluru, Aboriginal involvement in Protected Area management is on the verge of degenerating into Smokey the Bear style ranger training where the role of traditional owners is simply to add an interpretive and marketable ethnic element to running the Parks (Cordell, 1993:8).

Consequently, joint management arrangements for protected areas need to acknowledge the benefits to be gained by all parties in the formal recognition of Aboriginal rights and interests in marine parks. This recognition could perhaps best be achieved by approaching negotiations for joint management of marine parks from the perspective of
acknowledging traditional Aboriginal knowledge and practices. In this way, indigenous communities can manage a protected area’s resources in a manner that is both environmentally and socially sustainable.

A management structure designed around day-to-day input by Aboriginal communities and natural resource agency staff alike, will see the establishment of marine parks which allow the identification of all expectations for each individual community. The joint management model that the Australian Nature Conservation Agency used in central Australia may bring with it the principles, but not necessarily all the practices for marine parks, as the practices need to be defined by the joint management participants at each individual location.

Aboriginal Land Rights, Ownership, and Community

In the 1992 “Mabo” decision, the High Court of Australia recognised that in 1788 Aboriginal communities owned the various parts of Australia under customary ‘native title’ (Wootton, 1993:18). However it also recognised the sovereignty of its own state, Australia. The end-result of the judgement was that aboriginal people could only inherit land that they had maintained customary connection with, but “...they could lose their title if the new sovereign disposed of the land in a way inconsistent with their title” (Wootton, 1993:19). By this definition, in 1992 very little native title remained. In marine parks however, it is possible to argue that land usage is not inconsistent with native title. This would usually not negate the existence of the park, but would leave the relevant Aboriginal people with ownership rights that demand respect (Wootton, 1993:20).

Recognition has thus been given to the role that marine parks can fulfil in furthering the aspirations of indigenous people for access to traditional sea areas. Access to these areas is integral to the preservation of culture and traditional lifestyles, as is gaining access to resources of economic and social significance to the process of self-determination. In recognising this, there is now the imperative to not hinder this process, and to indeed actually promote it.

While much of the debate over Aboriginal territorial rights has been restricted to land rights, as noted by Allen, “...the boundaries of ancestral estates do not abruptly end at the water line: to indigenous coastal and island people, land and sea are one” (Allen, 1992:16). However, the Commonwealth Land Rights Act (Northern Territory) 1976 does not allow indigenous people to claim seawater country. “Instead, it confers a right of traditional use of marine resources up to 2 km off the coast of Aboriginal land- without providing any mechanism for Aboriginal people to participate in the management of those resources” (Allen, 1992:16). “Traditional ownership of ‘seawater country’ may be generically called Customary Marine Tenure or CMT. It is a system of property rights that pre-dates by millennia the system which English colonists brought to this country over 200 years ago. But nowhere in Australia does it have judicial or legislative recognition—yet. Some legislation makes provision for limited traditional use of marine resources, but such provisions more effectively deny customary marine tenure rather than recognise it” (Allen, 1992:16).

The United Nations Convention on the Law of the Sea came into effect in Australia on 16 November 1994. This has potential for enormous flow-on benefits for indigenous coastal communities. The Convention allowed for the declaration of “Australia’s Exclusive Economic Zone” (EEZ), which effectively extends Australia’s jurisdiction to 200 km offshore (excluding areas where neighbouring borders conflict with this). This trebles the area in which Australia has priority access to natural resources, and gives Australia the world’s second largest exclusive marine economic zone (Cribb, 1994: 1). In the light of this increase in our natural resource wealth, it will be interesting to note the outcome of a current Aboriginal Claim for Sea Rights in the Arafura Sea (Nason, 1994), which will undoubtedly be joined by other claims as Aboriginal and Torres Strait Islander groups move to regain access and management rights to traditional resources within the EEZ. The potential for a sustainable harvest from the EEZ worth $30 AUS billion annually (Cribb, 1994: 2) could provide coastal Aboriginal communities with tremendous economic opportunities and resultant flow-on social benefits through increased employment and economic independence.

The Supreme Court’s recent decision on the Eddie Mabo case has prompted the Federal Government’s current stand on Aboriginal land rights. Implicit in this stand is the recognition of the Australian aborigines’ traditional rights to ownership and use of the Australian continent, although some areas have been excluded from inclusion; these include some pastoral and mining leases. Having recognised this, it must surely follow that decisions relating to Aboriginal land, heritage and culture have to involve aborigines themselves. Decisions as to what sites are visited, who the visitors are, and the intensity of use are of great concern to aborigines. The various states and territories of Australia have differing levels of involvement of aborigines in this area, but overall, the States are
regarded as failing in their responsibilities (Carruthers & Cant, 1994).

Northern Australia and some of the more recent national parks have not suffered the separation of Aboriginal culture and natural place management that characterises the situation in most of Australia. This separation of cultural and natural resources is seen as a product of the lack of recognition of (a) Aboriginal occupation of the continent in pre-European times, and (b) that the landscape was the product of Aboriginal culture (Sullivan, 1991).

This lack of recognition of Aboriginal culture has even extended to some park managers feeling

...that Aboriginal site management was in conflict with, or ran counter to their other management responsibilities.” (Sullivan, 1991:169) Some commentators on the issue see this stand as hypocritical given that it is “...Aboriginal cultural heritage value which is exploited in the promotion of the parks for the economic benefits of tourism (Blowes, 1991).

In telling a story about the defining of Aboriginies, their lands and their cultures, Barlow makes four points:

Aboriginies have never had to define themselves, their cultures or their lands - that definition was made in the time before time when the great ancestral creative beings brought into existence land, people, and Law. All other definitions have been made, by people who are not Aboriginies, for their own reasons. People who are not Aboriginies continue to define Aboriginies, their cultures and their lands for their own reasons. These definitions are effectively imposed on Aboriginies so that they are impelled to act in accordance with them (Barlow, 1991:57).

Management Frameworks

Aboriginal cultural themes, together with the significance of protected areas to Aboriginal people are increasingly being promoted by government and non-government conservation and tourist agencies as values and attractions of the land as a tourist destination. Aboriginal people are still largely in an advisory role with respect to this appropriation of Aboriginal culture.

—Wenne-Green et al. (1992:375)

The Euro-Australian environmental ethic has traditionally placed Science on such a pedestal that practices generally considered unacceptable within conservation areas have been permitted “in the name of scientific research.” Thus the collection of flora and killing of fauna could be carried out by scientists with relative impunity. The failure to recognise Aboriginal culture and the importance of rituals and traditions to it, meant that Aboriginal groups were denied an equivalent access to the flora and fauna. A member of the Australian Heritage Commission provides the following example: “I have a vivid recollection of a park superintendent carefully explaining to a group of Aborigines why they could not shoot a kangaroo from the park for a special cultural gathering they were organizing. The appearance of a young research scientist with six kangaroo carcasses was justified as being “for scientific research.” The researcher got his PhD; the Aboriginal group did not get their dinner” (Sullivan, 1991:171).

Problems arising from different perceptions marine parks include differing perspectives as to what constitutes management, what is the purpose of the parks and protected areas, the role of Aboriginal staff in management, and, whether there is a place for traditional usage of the lands by Aboriginal people for hunting and gathering, and holding ceremonies at sacred sites.

The term ‘joint management’ used here refers to situations where government agencies and indigenous peoples have equal representation and authority on management committees. The current emphasis on developing a ‘model’ for joint management, that can be transposed from one situation to another, gives insufficient acknowledgment to the unique attributes of different conservation areas and the particular relationship that local indigenous communities have with these areas.

A central factor in the success of the joint management model at Uluru was the commissioning of a study review the Anangu (traditional landowners) perspectives on the developing management model. This was essentially a sociological study to document community problems and “...to develop, in full consultation with them, realistic plans for the future of the community” (Young et al, 1991:164). The acknowledged success of this study, and its ability to be applied to other developing joint management arrangements, suggests an important role for community-based sociological studies within the protected area joint management framework.
With joint management arrangements currently being negotiated for Jervis Bay National Park, it is an appropriate time to incorporate consultation processes to ensure the inclusion of Aboriginal perspectives into the longer term joint management processes. This may help to overcome historical attitudes within national park management that failed to recognise Aboriginal culture and regarded only the conservation of 'natural resources' as important. This lack of recognition of Aboriginal culture has even extended to some park managers feeling "...that Aboriginal site management was in conflict with, or ran counter to their other management responsibilities" (Sullivan, 1991:169).

To adequately address these issues Aboriginal people must play a significant role in the marine parks management framework, and to facilitate this there needs to be mechanisms which allow for the cross-cultural transfer of information and understanding.

Joint management arrangements in Australia vary widely between the States and Territories. In the Northern Territory for example, "The Land Rights Act provides for the recognition of Aboriginal traditional rights in the form of a grant of statutory freehold title" (Bowes, 1991). In contrast, "Aboriginal people in New South Wales have no legal responsibility in decision-making about Aboriginal site protection, site management or the destruction of sites due to development," and "...have no legal say in regard to the granting of research permits dealing with Aboriginal sites" (Geering, 1991:208). This issue causes concern among aborigines in NSW as they often have different priorities for restoration or conservation than site management authorities (Geering, 1991:211). Indeed the NSW situation is seen as so unsatisfactory that Under the proposed arrangements, genuine Aboriginal involvement in management is unlikely (Bowes, 1991:6). Similarly, the situation in Queensland is unlikely to prove satisfactory, with the relevant legislation (the Aboriginal Land Act 1991 and the Torres Strait Islander Land Act 1991) being labelled via a colloquialism as Clayton's Legislation (Woennne-Green et al., 1992), or in other words, land rights legislation by name but not capable of producing the desired outcome.

The traditional Euro-Australian approach of park management made a distinction between natural and cultural resources. Natural resources were to be conserved, whilst cultural resources were to be preserved for exhibition. Aboriginal peoples, however, make no such distinction between the cultural and the natural (Bates & Witter, 1991; Nesbitt, 1991), as their relationship with the land is fundamentally different. Certain sites may have a special significance, but the entire landscape has meaning within their spiritual base, the Dreamtime. "Indeed, the majority of Aboriginal religions have a centre at a particular place, be it river, mountain, plateau, valley, or other natural feature" (De Lacy, 1991A:1).

In contrast to this, Europeans "...practised relationships of subjugation and domination, even hatred, of European lands," and "...made little attempt to live with their natural communities, but rather altered them wholesale" (De Lacy, 1991A:1). Aborigines lived within the limits of the land by letting the seasons determine their movement through the land. Different areas produced food in different seasons, and as the natural food in one area diminished the aborigines moved on to another and allowed the previous one to regenerate (Kneebone, 1991). The deep personal attachment to the land that aborigines have, is at odds with Western culture and concepts of ownership. Aborigines have traditionally seen themselves as belonging to the land, rather than the reverse.

Aboriginal communities are currently involved with ANCA in joint management of a variety of conservation areas. The two most prominent examples are Kakadu National Park (NT) and Uluru-Kata Tjuta National Park (NT). The Agency and Aboriginal participants regard these two examples as highly successful (ANCA, 1993; Tjanpiwa, 1991) and ANCA has been investigating the appropriateness of introducing a similar model to JBNP. Towards this end, members of the Wreck Bay and Jerrinja communities, from the Jervis Bay region, have visited Uluru and Kakadu to examine the 'model' first hand.

This examination by the community is an essential first step in acknowledging the community's right to act on the basis of their own observations and perceptions. This acknowledgment is an essential element as it enables community empowerment via knowledge gained through active participation. Adequate consultation procedures for joint management arrangements rely on all parties being fully aware of all options and proposals, and this awareness in greatly advanced by active participation.

During the 1980's government nature conservation agencies were developing initiatives for the greater involvement of...

...Aboriginal people wherever appropriate and possible in the management of reserved natural areas, such as national parks. Two objectives of these initiatives were to ensure the integrity of Aboriginal culture (including situations where the indigenous peoples do not hold title to the land) and to combine traditional Aboriginal knowledge with modern non-Aboriginal conservation practices (Taylor, 1985:2).
As Indigenous peoples note, the integrity of their culture depends on their continued close association with the land, and fulfilling their responsibilities of looking after their land, according to the their law (Bogle, 1988). Indigenous peoples see themselves as 'true custodians' of the land and need recognition of this through involvement in national and marine parks in negotiating decisions regarding research and development, tenure changes, ranger employment and management decisions (Royee, 1992). Their role in management is vital as cultural factors, which may be beyond the understanding of non-Aboriginal staff, can determine what is appropriate in land management and who is to be involved.

At present in Australia there is an alternative approach to indigenous involvement in protected areas. This approach entails indigenous community initiatives that have "...the potential, ultimately, to render both Queensland and Northern Territory co-management innovations obsolete...communities themselves are seizing the initiative and declaring their own indigenous tenure-based protected areas, without waiting for official recognition. By presenting government agencies with a 'fait accompli', this strategy shifts the burden and cost of negotiating any challenges or disputes to the State" (Cordell, 1993:9). An example of this is the Kowanyama Aboriginal community on the western Cape York Peninsula, Queensland.

**Kowanyama**

Kowanyama is an Aboriginal community situated on the western side of Cape York Peninsula. The community is achieving considerable success in negotiating resource management arrangements and is respected for its innovative approach. Negotiations with commercial fishing interests have led to the voluntary closure of commercial fishing within ancestral fishing grounds, and Aboriginal and non-Aboriginal user groups have been involved in the creation of a catchment management network. Also established is a ranger program that is ‘responsive to local cultural and natural resource preservation priorities,’ and ‘community-oriented interpretive and educational projects designed to integrate traditional environmental knowledge in the schools’ (Cordell, 1993:9).

The communities at Kowanyama and at Malanbarra (approx. 200 km away at Cairns) see Aboriginal involvement in resource management as going beyond national parks and marine parks, and point out that "...it would be a sad thing indeed if the only land that was cared for in the future was national parks and other protected areas" (Daphney & Royee, 1991:43).

**Jervis Bay National Park**

The Wreck Bay community at Jervis Bay has been negotiating with the Commonwealth Government, since 1992, on the issues of Aboriginal ownership, lease-back and joint management of JBNP. Throughout this period community members have perceived "...significant governmental morphological problems with respect to the implementation of joint management, the main one being..." (Aron, 1992). As one Wreck Bay member put it, "...maybe they are thinking we are just not Aboriginal enough to run the national park like the people at Uluru?" (Nutting, 1993:32).

This assertion however is countered by the views of a Wreck Bay inhabitant, George Brown. Brown places himself as a descendant of one of the seven tribes of coastal NSW that are all closely linked, and that while he came from Morrow (NSW), he included Jervis Bay as part of his history (Fortescue, 1994). Both the Jerrinna and the Wreck Bay communities claim a long association with the area in their film ‘We Come From The Land’ (Stevens, 1991), and are pressing for land rights on both State and Commonwealth land, including Beecroft Peninsula. A review of cultural factors for Jervis Bay suggests that prior to European settlement, either the Guungara or the Dharru tribes inhabited the area. Complicating this further, a linguist study of the area shows the boundary line between the Dharawal and the Dhurga dialects cuts the Bay in half (Zakharov, 1987).

Another example of issues encountered in joint management can be seen in the Draft Plan of Management for Taylors Lake Women’s Place, near Broken Head on the far north NSW coast. This land is at present predominantly Crown land and is being proposed for gazettal as an Aboriginal Place, under the National Parks and Wildlife Act 1974, which enables the Minister to declare an Aboriginal Place over any area that “is or was of special significance with respect to Aboriginal culture” (s,84) (Appo, 1994). The lake bed and water have special cultural significance to Aboriginal people, and the area was traditionally restricted to visitation by women only. There is currently concern over the misuse of the area with resultant degradation of the lake shore and surrounds, and a deterioration of water quality.

**Creating A Process**

Adequate time must be given to Aboriginal groups to comment on particular issues and development proposals,
as the process of consultation with the whole community takes some time. In the negotiations over collaboration at Uluru one of the facilitating features was the allowing of sufficient time to establish good working relations (Reid et al., 1992). There have been instances in Queensland where only two weeks was given for this (Finlayson, n.d.). All interested parties need a chance to comment on the specific meanings and values a location has for their community. This is important as particular marine areas may be included in the traditions of different regional groups.

An Aboriginal academic offered the opinion that the approaches to management of East Coast indigenous peoples would probably differ from the approaches of communities from other regions due to cultural and historical differences (Bloomfield, 14/10/1994). In particular, Bloomfield referred to NSW indigenous peoples bearing the early impact of European settlement and attitudes, and as such there is historical mistrust and animosity. Further differences stem from the scientific studies that underpin natural resource management. These rely on detailed and systematic inventories of environmental data for status assessment and detection of change. In this way the impacts of events and developments on ecosystems can be identified over time. However the underlying assumptions of the people designing this research affect, in a fundamental way, the nature of the goals that are sought and the results that are achieved. Joint management arrangements require that the human element be incorporated into the natural resource management framework, and thus social science methods need to be employed. Like the earth sciences, social sciences need inventories to complete studies, but social science inventories need data on people. 'Community Studies' is an approach eminently suited for application here as it encapsulates a variety of conceptual frameworks for providing such data and analysing a community over time.

A final point on this topic is that traditional ecological knowledge may not be obvious to the western-trained scientist as it may be disguised in the form of cosmology and ritual (Woodley, 1991). The community studies researcher who becomes more familiar with Aboriginal traditional knowledge and meanings will be able to extract an understanding of this ritual for a crosscultural interpretation. In Australia, where indigenous peoples have managed the land and coastal resources as part of their culture and spirituality for over 40,000 years, the joint management process must be based on an understanding of traditional ecological knowledge if arrangements are to be sustainable both environmentally and socially.

Aboriginal Land Rights needs processes in marine parks that will facilitate cross-cultural understanding between the European invaders and the largely dispossessed indigenous peoples. Policy and process are about people, their culture, and the nature of the interaction between them. Perhaps their most direct application to the joint management process is that they can offer an “...opportunity for examining the impacts of externally induced changes on the social structure of localised social systems” (Wild, 1984:8). Thus they may be applied directly to Aboriginal communities negotiating for access and management rights in the conservation estate.

For effective co-operative management mechanisms to be established in marine parks and other conservation areas there needs to be trust and respect between the traditional custodians of the land and the more recently arrived park management agencies. This respect and trust can only come through understanding and goodwill. For this to happen both parties must understand the other’s culture in order to come to terms with each other’s interpretation and perceptual view of any given situation. This understanding requires facilitation across a significant cultural divide.

The role of culture in interpersonal dealings is more fully explained below:

...cultural learnings influence the perception of other people. Developing crosscultural understanding involves perceiving members of other cultural groups positively. By understanding the basic principles of person perception, and the natural effects of one’s own cultural experience and learnings on perceiving other people, unproductive explanations of crosscultural misunderstandings as prejudice or even just differences may be replaced with productive methods of avoiding misunderstandings and stimulating positive perceptions of other people. How we perceive other people affects how we behave towards them and how they, in turn, behave towards us” (Robinson, 1988:49).

To effectively deal with cultural differences within the joint management framework there is thus a need to include social science approaches and methods.

The Commonwealth Government is alone in its efforts to establish joint management arrangements with indigenous peoples for protected areas in Australia. Four national parks in the Northern Territory currently have joint management as a result of Commonwealth action, and Jervis Bay, NSW is soon to be added to this list. The State
governments have been openly criticised in the media by Federal Ministers and have not responded to defend their position. This is not surprising given the State’s policies and legislative arrangements on the issue. In 1992, Woennen-Green et al. (1992) produced a comprehensive review of Aboriginal participation in the Australian conservation estate, which highlighted the general lack of legislation or policy to effect any change of the current system.

Exceptions to this are Queensland’s Aboriginal Land Rights Act 1991 and Torres Strait Islander Land Rights Act 1991, and possibly South Australia’s National Parks and Wildlife Act 1972. The Queensland legislation is not likely to promote the joint management situation due to the inclusion of a “leasing in perpetuity” clause which is unacceptable to Aboriginal groups. However, a review of the South Australian Act has the potential to provide a statutory means for negotiations of Uluru-style joint management arrangements, and “...the negotiations for the Wuruma National Park illustrate the potential for arriving at a detailed negotiated agreement between Government and Aboriginal people for the joint management of a national park in the absence of supporting legislation, provided there is a positive assertion of the Government’s will” (Woennen-Green et al., 1992:23).

New South Wales has proposed legislation which would partly address the current lack of government initiatives but substantial action on this issue has not been seen. Indeed Government policy on coastal issues would seem to indicate that action is very unlikely. The Draft Revised Coastal Policy for NSW (as proposed by the Coastal Committee of NSW) fails to mention Indigenous Peoples’ issues in its introductory chapter, accords them almost two lines in the ‘Significance of the Coast’ chapter, and in the ‘Major Issues’ chapter Aboriginal interests are only very briefly mentioned as a heritage item within national parks and protected areas, and not mentioned at all in regard to aquatic reserves or tourism. The single remaining reference to Aboriginal interests is as part of a general goal ‘to protect and conserve cultural heritage’:

The protection of Aboriginal cultural heritage is essential for contemporary Aboriginal people and important for non-Aboriginal people as part of the historic development of the country (NSW CC, 1994:61).

Present and future management of the coastal zone must therefore incorporate mechanisms that recognise and ensure that the rights, roles and interests of Aboriginal and Torres Strait Islander communities, including community councils and their representative organisations, are incorporated into the management process (DASET, 1992:5).

The current negotiations for joint management arrangements at Jervis Bay look set to provide NSW with its first jointly managed national park—albeit on Commonwealth territory—and it is therefore an appropriate time to acknowledge the mechanisms that have been incorporated, and that are achieving positive results. The Mununjalu experience highlights the success of social sciences approaches to joint management, and the evidence from around Australia indicates the importance of acknowledging differing cultural perspectives which enable a sound basis for joint management arrangements. Further, international studies in the field of participatory action research show the enormous potential for the combining of indigenous community development and natural resource management. The natural resource management agency, the local Aboriginal community, and the joint management process at Jervis Bay all stand to benefit greatly from the recognition of the lessons learnt in other areas.
The European-style legal system that currently operates in Australia is under constant scrutiny, adjustment, and adaptation. In joint management arrangements such as at Uluru-Kata Tjuta, two separate and distinct legal systems are operating side-by-side (Bogle, 1988). The inevitability of conflicting viewpoints requires that there be the resources and expertise to appropriately handle questions of differing legalities. However, the actual situation in the coastal zone is far from adequate in these terms: “Those responsible for managing coastal zone resources ‘on the ground’ have the greatest need for resources and expertise but in most cases have limited capacity to acquire them” (RAC, 1992: xv). Successful joint management should aim to combine the different levels of expertise and resources from marine park management agencies and Aboriginal communities.

A step towards fuller recognition of Aboriginal and Torres Strait Islander cultural legitimacy was taken recently when Aboriginal Affairs Ministers and Attorneys-General from across Australia prepared to incorporate Aboriginal customary law into the nation’s mainstream legal system. This would mean Aboriginal communities may be exposed to dual systems of law (McLean, L., 1994), but would also allow the application of Aboriginal law to many resource management issues. Community consultation procedures and an equitable joint-management negotiation framework are essential in the success of this process.

The Relevance of Social Sciences to Marine Park Management

Approximately 14% of the Australian coastline and 33% of the NSW coastline is included in conservation areas (HORSCERA, 1991:23), and can thus be subject to Aboriginal land claims. With over 85% of Australians living, working and playing on the coast (RAC, 1992: xxii) conflict over access and management of these conservation resources is inevitable and needs to be anticipated. Accompanying this anticipation there needs to be appropriate, community-focused mechanisms for resolving this conflict. If the issue at the centre of the conflict revolves around something as elementary as a belief system (as is the case with joint management negotiations), then much work needs to be done with the communities/party involved to negotiate effective compromises. A community studies approach to consultation within the negotiation procedure is appropriate as cultural factors are crucial in determining the nature of any joint management arrangements.

Increasingly the imperative for natural resource managers is to take a holistic approach to joint management of marine parks. To do this they must consider not only the resource(s) for which they are directly responsible, but also those factors which have effects upon their areas of responsibility, as well as the effects that their resource management has on others. The recognition of Aboriginal cultural perspectives and the concentration of their population in coastal areas historically gives them significant rights to be marine park managers and a part of management frameworks. Additionally environmental science studies are essential in identifying and resolving the multitude of environmental problems that stem directly or indirectly from the activities of people. However, many management problems arise from the way people interact, and to adequately address these and Aboriginal perspectives there is a real need to integrate sociological studies into the broader field of coastal and marine resource management.

References


MARINE PARKS MALAYSIA: TOURISM, IMPACTS AND CONSERVATION AWARENESS

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Abstract: One of the management goals of Malaysia's marine parks is to encourage tourism and recreational uses which are compatible with the primary goal of conserving natural resources. The recent rapid, unexpected growth of tourism poses new challenges for park management. This may require a reassessment of the present top-down, activity-focused management approaches, overlapping jurisdiction of land and water resources and external threats to ensure effective impact management.

This study was aimed at gaining some preliminary understanding into the tourism phenomenon, using Payar Island Marine Park as a case example. This small case study was a quick analysis into a little studied situation. Respondents were asked to identify tourism/recreational activities in this Park, impacts of tourism and from external threats and types of management and interpretive activities they felt were required for tourists' enjoyment of this Park as well as for conservation of resources. Eight marine park managers, with direct involvement in the planning and management of this Park, answered a questionnaire survey as well as provided additional, environment-related information about the park through personal communication. In addition, face-to-face interviews were conducted with twelve tour operators based in Langkawi Island. Descriptive statistics are given to provide preliminary insights into the six groups' perceptions on tourism and conservation. Both managers and tour operators agreed that it is important for marine parks to be protected in perpetuity. Marine parks should also be promoted as areas for enjoyment, learning and appreciation. However, tour operators felt that information required for instilling awareness about the park is inadequate. Implications of these findings and other perceptions on management and conservation for planning, management and interpretation are presented.

Keywords: Marine Parks Malaysia, marine tourism, impacts, management, environmental education

Introduction

Two highly successful "Visit Malaysia Year" campaigns in 1990 and 1994 incorporating aggressive international marketing of the country's tourism attractions by the Ministry of Culture, Arts and Tourism (MOCAT) has launched Malaysia as a new and promising entrant in international tourism. In 1990, Malaysia welcomed six million visitors to the country, bringing in a total of RM 4.5 million (USD 1.8 million) in travel receipts. These figures reflected a two fold increase in visitor arrivals and a tripling of total travel receipts when compared with 1985 figures (Government of Malaysia, 1991). In 1994, the number of visitor arrivals remained high at 7.2 million and total tourism revenue doubled to RM 8.3 million (USD 3.3 million) (NSTP, 1996). Today, Malaysia has displaced its neighbours, Singapore, Thailand and Indonesia, as the top ASEAN tourist destination.

Tourism and the Environment

Many of Malaysia's tourism attractions are nature-based, located in lush and verdant hills, forest reserves and national parks, rivers, waterfalls, sun-soaked golden beaches to idyllic islands. The country's rich natural heritage is being promoted as offering alternative tourism experiences; promising visitors natural, ecotourism experiences and adventure.

At the same time the Government promotes these natural assets aggressively in the tourism market, she also realizes that sustainable nature tourism development requires effective environmental protection and management. Thus, it is within the Federal Government policies to ensure that tourism programmes and projects are implemented with minimal environmental degradation. Most tourism development projects located in natural settings are listed as prescribed activities under the Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order, 1987, conferred by section 34A of the Environmental Quality Act, 1974 and environmental impact assessments are mandatory. In addition, MOCAT has commissioned the World Wide Fund for Nature (WWF, Malaysia) to draft a National Ecotourism Policy to provide a blueprint for the sustainable development of nature and eco-tourism in the country.

Coastal and Marine Tourism

Although Malaysia has often being placed in the international limelight for being home to the world's oldest tropical rainforests, another part of her natural heritage is her lesser known but equally diverse marine heritage. Although the beaches and islands with surrounding crystal clear waters have been traditional lures for both domestic and foreign visitors, the coastal and marine tourism sector itself is a new and emerging sector. There is a tremendous paucity of statistics (beyond visitor numbers) and information specific to this sector.

In some ways, tourism growth has brought about infrastructure, modern amenities and economic development to many rural coastal areas. At the same time, uncoordinated and poor planning in many cases have led to negative impacts such as coastal erosion, sedimentation, coastal pollution, conflicts of use and rising costs of living for local communities. Presently, the planning,
development and promotion of the coastal and marine tourism sector and its related products come under the general umbrella of the tourism sector. However, the rapid speed at which this sector has been developing in unique coastal and marine environments warrant that it be given special and separate attention in policy formulation, planning and management.

With this background, this paper would like to focus attention on some very special marine environments, that is, the marine parks of Malaysia. Marine parks are among the natural assets being promoted as tourism destinations.

Marine Parks Malaysia

Malaysia currently has 38 marine parks under Federal jurisdiction. These marine parks, starting from the shoreline (at the low water mark) to two nautical miles offshore, were established under the Establishment of Marine Parks Order, 1994, conferred by the Fisheries Act, 1985. The Payar Island Marine Park is the only one located in the Straits of Malacca, while another 34 islands in the South China Sea, off the states of Terengganu, Pahang and Johore, have been gazetted as parks (Figure 1). Under the IUCN classification of protected areas, the marine parks of Malaysia fall under Category II—National Park. However, these parks come under multiple jurisdiction. The Department of Fisheries, Ministry of Agriculture, has been given the responsibility for the development, administration and management of the waters and resources within these marine parks; but the land or islands adjacent to the parks belong to the respective State governments.

The overall goal of Malaysia’s marine parks as stated in the Marine Parks Policy is “...to protect, conserve and manage in perpetuity marine environments of significance and to encourage public understanding, appreciation and enjoyment...by present and future generations” (Ch’ng, 1990, p. 2). Under this goal are four main management objectives. Resource protection is the chief objective. Recreational uses compatible with the marine environment are encouraged making visitor management the second objective. To promote understanding and appreciation of these marine environments, interpretive management is the third objective. The fourth objective is research management. In addition, marine park policies are formulated through a consultative decision-making process by the National Advisory Council for Marine Parks and Marine Reserves, formed in 1987.

Tourism in Malaysia’s Marine Parks

Tourism use of Malaysia’s marine parks has been on the rise the last five to six years. Although still considered at an infancy stage, this phenomenon is posing new challenges to managers of these parks, whose traditional responsibility is natural resource management. Its advent and rapid take-off has left park managers without the adequate “know how” on dealing with tourism-resource use issues. The top-down and activity-focused approaches to planning and management of marine parks have offered little insight into the management of tourism/tourists and resulting impacts. At the same time, tourism in Malaysia’s marine parks has yet to be well-documented, monitored and evaluated, leaving park managers with insufficient objective information for decision-making and actions. Park managers faced with this new, daunting challenge, are guided only by broad management objectives and a lot of intuitive, subjective judgments in their management of tourists’ behaviour and negative impacts on the reefs and other marine resources. Responses to impacts are often ad hoc and reactive in nature rather than proactive and planned with foresight.

The case study presented in this paper is aimed at developing some preliminary insights into this tourism phenomenon; which up to the present, has not been comprehensively assessed. The Payar Island Marine Park is used as a case example; to illustrate the status quo of tourism at one of Malaysia’s marine parks. Popular tourism/recreational activities were identified. Respondents, consisting of park managers and tour operators, were asked to identify the types of management and interpretive activities they felt were necessary for tourists’ enjoyment of the Park while simultaneously fulfilling the conservation objective. Their conservation awareness on threats to the Park were gauged. Implications of findings for present management and interpretation strategies are presented in the case study.

Marine Park Tourism: The Case of Payar Island Marine Park

Geographic Scope of Study Area

Located approximately 35 km from the mainland coastal town of Kuala Kedah in the north-western state of Kedah, the Payar archipelago comprises four islands: Payar, Kaca, Lembu and Segantang. The Marine Park, gazetted in 1990, is strategically located between the two islands of Langkawi to the north and Penang to the south; the latter two islands are highly developed tourist destinations (refer to Figure 1 for location).

Payar Island, with an area of 31.2 ha., is the largest island in the group. It is also the only island with sandy beaches of significant size, two of which are 100–150 m long. The rest of the island is rocky, made up of steep cliffs, gullies and water-line caves. The other three islands, Kaca, Lembu and Segantang, are rocky outcrops.
Where are the 38 Marine Parks Located?

Figure 1. Location of marine parks in Malaysia.
Ecological Features

This group of islands has been considered ecologically significant because:
- it has the only clear water coral reefs on the west coast of Peninsula Malaysia and one of the few coral reef systems in an Indian ocean environment within Malaysia; and
- diverse habitats can be found within a relatively small area; 35 coral genera, 92 marine invertebrates and
- 45 genera of fish have been recorded (Universiti Pertanian Malaysia Expedition, 1982).

In addition, the south-western tip of Payar Island, known as the "Coral Garden," has a prolific cover of soft and hard coral varieties such as the multi-coloured Dendrophyllia, gorgonian and Tubastrea corals and in deeper waters, Dendrophyllia and small colonies of black corals (Antipathes sp.). The reef systems around the islands act as important breeding, nursery and feeding grounds for many fish and marine life.

On top of marine life, Payar Island itself has a lowland dipterocarp forest cover. The other islands, being rocky in character, support sparse vegetation and stunted bushes (Aikanathan and Wong, 1994).

Tourism Attractions and Facilities

Before the advent of tourism, the waters around the islands were fertile fishing grounds for fishermen from the coastal communities in Kedah. The main island, Payar, was used as a sheltering place by fishermen and their vessels. Since the establishment of the waters as a park, fishing is prohibited within the two nautical mile (nm) zone. The lack of fresh water sources on the islands have also deterred human settlements.

The marine park is accessible from at least three main points, Penang (at a distance of 32 nm) and Langkawi (19 nm) as well as from the mainland, from Kuala Kedah (15 nm). Since the establishment of the park and provision of easier and safer access, visitation numbers have increased many fold, from a low 1,373 visitors in 1988 to a staggering 70,419 visitors in 1995. (Figure 2 illustrates this dramatic increase in number of visitors; 1996 figure up to the month of March).

Park authorities have built a jetty on the main island of Payar, where tour operators bringing in visitors by speed boats may moor their boats and allow visitors to disembark. Payar houses a Visitors' Centre where various exhibits on marine life in the islands are displayed. The Park has also provided picnic facilities, tables and benches and a restroom, at the main beach area for day trippers to the island. Overnight camping is allowed with a permit but is limited to a physical capacity of 30 permits at any one time.

Without doubt, the rich marine life and clear waters, with an average visibility of 10–20 m (30–60 feet), are the main attractions at this marine park. Another major attraction are the 200 or more “baby” (juvenile) black-tempered sharks, which swim up close to the main shoreline at Payar Island. Snorkelling and diving are the main water-based recreation activities in the Park. Mooring buoys have been installed by the Department of Fisheries at several popular dive spots in the Park.

Off Payar is a floating pontoon serviced by a privately operated catamaran (the only one in the country), which is capable of carrying a maximum of 162 passengers daily from Langkawi to the Park. The catamaran operator provides visitors a full range of facilities such as an underwater observatory, glass-bottomed boat rides, snorkelling and diving opportunities.

Methods

Sample

The lack of published studies on the tourism phenomenon in Malaysia’s marine parks makes it difficult to define problems and issues surrounding this sub-sector. Yet, tourism is developing so rapidly that objective data on it must be quickly obtained and information organized for the formulation of better and more effective policy guidelines and management alternatives.

To provide preliminary insight on the tourism situation at Payar, a quick survey was carried out. Respondents to the questionnaire survey were drawn from two groups deemed as being confronted by issues on the subject:
1. Department of Fisheries (DOF) personnel who are directly involved in the administration, planning, policy-making and/or day-to-day management of the Payar Island Marine Park; and
2. tour operators who regularly conduct tours to the marine park.

A total of eight staff from the DOF were requested to fill in the questionnaire. They were from the DOF Headquarters in Kuala Lumpur and the State DOF in Kedah.

Instrument

The survey questionnaire consisted of seven sections covering topics on perceptions on the role of marine parks in general, identification of recreation/tourism activities, purpose of visit, features of the marine park, park
Figure 2. Number of visitors to Payar Island.

Table 1. Motives rated as important.

<table>
<thead>
<tr>
<th>By Both Groups</th>
<th>By Managers</th>
<th>By Operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning about nature</td>
<td>Exploring the area (2)</td>
<td>Avoiding everyday responsibility for awhile (3)</td>
</tr>
<tr>
<td>Enjoying the sights and sound of nature</td>
<td>Talking to other people in the area (2)</td>
<td>Challenging nature with one's skills (3)</td>
</tr>
<tr>
<td>Discovering something new</td>
<td>Meeting other new and different people in the area (3)</td>
<td>Applying one's skills (3)</td>
</tr>
<tr>
<td>Experiencing the peace and calm</td>
<td></td>
<td>Developing one skills and abilities (3)</td>
</tr>
<tr>
<td>Learning about oneself and personal values</td>
<td></td>
<td>Gaining a sense of accomplishment (3)</td>
</tr>
<tr>
<td>Getting away from crowds for awhile</td>
<td></td>
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<tr>
<td>Releasing/reducing stress</td>
<td></td>
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<tr>
<td>Relaxing physically and/or mentally</td>
<td></td>
<td></td>
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<tr>
<td>Being with others who enjoy doing the same things</td>
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<td></td>
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<tr>
<td>Doing something with the family</td>
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</tbody>
</table>

Note: Based on the mode for each motive item. For second column, value in parenthesis is rating by operators and for third column, value in parentheses is rating by managers.
management, facilities and information, conservation awareness, features of the park important for diving and snorkelling and trip satisfaction. This article deals with the first six topics.

The majority of questions required respondents to indicate their response on a 5-point Likert scale. Number of items varied from question to question. Descriptive statistics from the data provide a preliminary overview on tourism at Payar and the perceptions of both managers and tour operators on several management and conservation issues.

Results

Recreation/ Tourism Activities at Payar

All the park managers agreed that water-based activities such as swimming, snorkelling, and SCUBA diving, and nature appreciation activities such as photography, underwater photography, learning about the marine environment, nature walks, and bird watching should be encouraged among visitors. These activities, if undertaken within certain codes of practice, can be compatible with the conservation objective of the Park. Most of the managers agreed that other activities, camping, relaxing on the beach and fish feeding, should also be encouraged.

However, only half of them agreed that activities like picnicking, canoeing and sun-bathing should be encouraged. This could be because of concerns over littering by picnickers, damage to corals in shallow water by careless canoeists and nude sun-bathing contradicting our cultural values.

The majority of the tour companies interviewed were established over the last three to four years. Most of them started tours to Payar only in 1994, when the number of visitors increased dramatically. Visitors are mainly from Japan, Taiwan, Hong Kong (the first three being the majority), Europe, Australia and New Zealand. Other than the catamaran operator who caters for large groups, average size of group may vary from 10-15 persons/group to as high as 25-30 persons/group.

The tour operators reported that their tour groups normally participated in the following water-based activities: swimming, snorkelling and SCUBA diving; nature appreciation activities: photography, underwater photography, learning about the marine environment (yet there are not many interpretation programmes at the Park); fish feeding, relaxing and sun-bathing. One third of the operators surveyed provided box lunches for their groups. The others preferred to take their tour groups to islands off Langkawi (as part of the island hopping package) where BBQ picnics are allowed.

Nature walks along the trails provided in the island is not a favourite activity among visitors. The operators reported that none of their guests engaged in bird-watching, canoeing and camping, although these activities are allowed and/or encouraged by the management.

Purpose of Visit

Motives of visit is a seldom studied topic in park management, yet knowing the motives of users for visiting a place or engaging in particular recreation activities is essential for consumer market segmentation and designing strategies for visitor impact management. Both managers and operators were asked to rate the importance of motive items for visitors to the Park.

While both managers and operators agreed on the importance of some motives of tourists to the Park, there also were differences (not statistical) between the two groups in their rating of importance of other motives (Table 1). On the whole, managers tend to have no opinion over many of the motive items. The operators appeared more confident in assessing the motives of their visitors, rating each item as either important or not important, rather than taking a middle stand of “no opinion.” In addition to those items noted in the third column of Table 1, managers also had no opinion over other motives such as experiencing solitude, keeping physically fit, getting away and feeling free and being with members of the group. Operators, on the other hand, rated these motives as unimportant. Getting exercise was the only motive item rated as unimportant by both groups.

Tour operators were also asked as to whether the island’s protected status influenced their tour group’s decision to visit. Seventy-five per cent (75%) of the operators agreed that the island’s protected status was an important factor in their group’s decision-making and had some influence on their choice of destination. One, a dive operator, reported that the island’s protected status was the main reason for their dive groups’ decision to visit.

Features of the Marine Park

Managers and operators were asked their opinions on the features (both physical and social conditions) of Payar which they considered important for adding to the experience of an enjoyable visit. Both groups agreed that bio-physical features such as the fish, present condition of coral reef, other marine life, good water quality and the opportunity for fish feeding were important and strongly added to an enjoyable visit (a median rating of 4–5). Only 50% of the managers felt that the lowland rainforest covering Payar added to an enjoyable experience compared to 75% of operators who rated this item as moderately or strongly adding to the experience.
In terms of encounters, the respondents rated four items:

- **Boat traffic.** Both groups agreed that the present level of boat traffic at the jetty area moderately lessened enjoyment at the Park (median rating of 2–2.5);
- **Present number of visitors at the Park.** Seventy-five percent of the managers felt that the present numbers either moderately or strongly added (rating of 4 or 5) to an enjoyable experience, while only one-third of the operators felt likewise. The other one-third perceived the present number of people as moderately or strongly lessening an enjoyable experience (rating of 2 or 1). Others reported that the present number neither added nor lessened visitors' enjoyment;
- **Swimming/snorkelling in overcrowded surroundings.** Half the managers rated this item as moderately adding to the experience while another third felt it moderately lessened. However, two-thirds of the operators perceived this condition as moderately or strongly lessening enjoyment (rating of 2 or 1);
- **Boats coming too close to swimmers/snorkellers.** Both groups agreed that boats which move too close to the recreationists strongly lessened enjoyment.

Other conditions which both groups rated as moderately or strongly lessening tourists' enjoyment of the Park were observing visitors not obeying regulations and seeing litter on the beach and in the water (median rating between 2 and 1).

**Crowding**

In separate questions concerning crowding on the beach/picnic area, swimming/snorkelling area and in the marine park on the whole, the operators felt that both the beach/picnic area (75%) and the marine park (58%) were moderately to extremely crowded (a median rating of 4). Crowding on Payar was a bigger concern during holiday seasons. The swimming area was perceived as being only slightly crowded (75% of the operators, a median rating of 2).

Almost all the managers, on the other hand, rated the beach/picnic area as the only area being moderately to extremely crowded. They were divided in their opinions on crowding in the other two areas. Half of the managers felt that the swimming area and the Park on the whole were crowded, the other half felt that crowding did not pose a problem.

**Park Management**

Managers and operators were asked to rate the importance of various park management activities necessary for ensuring the protection of the Park environment. These management activities were categorized into four categories:

1. **Planning and management activities** comprising designation of zones for various recreational activities, creation of buffer zones between conflicting activities, provision of mooring buoys, more developed facilities (such as chalets, restrooms), maintain a more undeveloped recreational setting, and stricter controls on development projects in the Park;
2. **Enforcement and regulatory activities** comprising strict enforcement of regulations, increase in frequency of patrols, number of park rangers for better enforcement and penalties for violation of Park regulations;
3. **Visitor management activities** comprising restriction of total number of visitors, establishment of visitor quotas on weekends and public holidays only, control of number of dive groups, restriction of large groups to certain areas, and limitation in length of stay in Park; and
4. **Provision of park services** comprising more signboards on Do's and Don'ts, ensuring the picnic area, trails and swimming/snorkelling area are well maintained and free of litter.

Figures 3a–d present the number of managers and operators rating the individual activities as important to extremely important for ensuring the protection of the environment. There were only two activities, strict enforcement of regulations and stricter controls on development projects in the Park, in which both managers and operators agreed unanimously as important to extremely important for protecting the environment. Most of the respondents (60% of the managers and 80% of the operators) felt that it was important to provide a more undeveloped recreational setting, that is, limiting the number of man-made structures on the Park. The groups were not in favour of more developed facilities such as chalets or a restaurant, with the exception of restrooms.

All the managers rated activities within the enforcement/regulatory and park services categories as important to extremely important for park protection (Figures 3b and 3d). These activities can be described as being structural or institutional in nature, that is, these activities are undertaken, regardless, because they are dictated by regulations or within the work functions of the managers.

Most of the operators, on the other hand, were more likely to rate those activities which did not curb the development of tourism or activities which enhanced the tourism experience on the Park as important to extremely important for protection of the Park as well. For instance, only one-third or less of the operators felt that restriction or control of numbers of visitors or length of stay (Figure 3c) as important or extremely important for park protection. On the other hand, almost all the operators agreed that planning through zonation, provision of buffer
zones and mooring buoys (Figure 3a) and the provision of park services (Figure 3b) as important to extremely important toward the protection of the Park, while simultaneously these activities also contribute toward more satisfactory experiences among visitors.

**Park Facilities**

With the exception of the catamaran operator (who does not depend on park facilities), the operators rated park facilities such as toilets, wastebins, picnic facilities, shelters and mooring buoys as being inadequate to extremely inadequate (median rating of 2 to 1). On the other hand, the managers felt that the park facilities such as wastebins, picnic facilities and mooring buoys, were sufficient for the Park (median rating of 4). They agreed with the operators that the existing toilet and shelters were insufficient. While most of the managers rated the existing jetty as being inadequate, only half of the operators agreed likewise.

**Park Information**

At least two-thirds of the operators who responded to the survey reported that information on the Park and its conservation aims, such as on natural history, terrestrial flora and fauna, marine resources and maps of trails and points of interest, were inadequate to extremely inadequate. A few did not know such information was available. On information regarding regulations of the Park, only half said that it was adequate.

On the whole, managers felt that information on the Park was more or less adequate. They were divided over the adequacy of information on natural history and marine resources; only half of them thought such information were inadequate. At least three-quarters of them agreed that information on park regulations were adequate to extremely adequate. The only exception was the availability of trail and points of interest maps, which 75% of them said that such material was inadequate.

Next, both groups were asked to rate the importance of various types of information (and which should be included in park management or tour objectives) which either party could provide to visitors to enhance their visit while at the same time help conserve nature. Both managers and operators agreed that it was important to extremely important to have the following types of information (based on the mode rating of each):

- on the types of facilities available;
- type of recreation activities allowed/disallowed;
- proper behaviour for tourists;
- on natural history, terrestrial flora and fauna and marine resources;
- on Park regulations; and
- directional signs along trails.

They agreed also that it was important to have special marine education programmes for children and teenagers visiting the Park.

The groups were more divided as to the importance of information on average number of visitors, history and cultural background of the area and the availability of maps on trails and points of interest. While most of the operators (at least 80%) thought maps and information on history and culture were important to enhance the experience of visiting the Park, only half the managers felt likewise.

**Interpretation Methods**

All the managers were in agreement that a variety of methods is necessary to communicate the kinds of information (identified as important earlier) to visitors. In interpretation planning, their choice would be to use brochures, signboards, exhibits and audiovisual programmes at the visitors' centre, face-to-face communication and brief talks by park rangers and labelled trails for effective communication with Park visitors and help the latter become aware of and better appreciate the environment.

The majority of operators (at least three-quarters of them in each case) responded that brochures, signboards, exhibits, audio-visuals and labelled trails should be used as means of interaction or communication with visitors at the Park. However, less than half were in favour of direct communication with park management, that is, face-to-face communication with rangers and talks by the rangers.

**Conservation Awareness**

While managers and operators thought it important to leave marine parks (in general) undeveloped and untouched by human's (median rating of 4 by both groups), on the one hand; they agreed that it was more (extremely) important that such areas be improved and developed in ways that prevented damage and destruction and be protected for present and future generations to enjoy (median rating of 5 by both groups). Therefore, it was important to promote activities such as diving, snorkelling and nature walks to help visitors enjoy and appreciate the natural setting of the parks (median ratings of 4 (managers) and 4.5 (operators)).

In addition, both groups felt it equally important to employ effective means of passing on information to people to make them more aware of and better appreciate the country's marine heritage (median ratings of 5 (managers) and 4 (operators)). Marine parks, in general, should not cater as much for commercialized activities such as picnics and barbecues and organized games/sports and facilities like hotel/resorts (median rating of 2.5 (managers) and 1.5
(operators). Finally, marine parks should be important places for and benefit scientific study and research.

**Threats Facing Payar Island Marine Park**

Managers and operators were asked to rate their level of agreement on whether certain external and tourism activities posed a threat to the Park (see Appendix 1 for list of activities). Managers were very much divided over whether the nine threats from external activities and ten threats from tourism posed a danger to the Park. Less than half of the managers agreed that the nine external activities were threats to Payar. On tourism impacts, only slightly more than half of the managers agreed that irresponsible acts by tourists and divers, the trampling of corals and litter/garbage presented threats to the Park.

In comparison, as shown in Table 2, operators agreed to a greater number of activities perceived as threats facing Payar. They were divided over three items only, small-scale fishing, the clearing of mangroves and overcrowding from tourism, half of them perceiving these activities as posing a danger to the Park and the other half did not.

**Discussion: Implications of Findings**

Several general statements based on the findings of the study can be derived:

- both managers and operators agreed that it was important for marine parks to be protected from degradation and damage and be set aside for visitors (present and future) to enjoy and appreciate the natural environment of the parks;
- on the whole, both groups seemed aware of the conservation objective, needs and issues facing Payar;
- the trend of increasing visitor numbers to Payar is expected to continue, until at least some form of "optimal capacity" is determined for the Park (in addition to physical capacity). Crowding, an issue identified by the tour operators in this study, may pose an additional and greater threat to the long-term sustainability of the Park's resources and the tourism industry itself. This study revealed a difference in perceptions on crowding between managers and operators;
- furthermore, this study indicated several differences (although not statistical) between perceptions of managers and operators on several planning and management aspects of tourism and conservation in the Park;
- operators tend to be greater aware of the needs of their clientele (more customer oriented in tourism management), as indicated by their more definitive stand on importance of motives, park management and interpretation activities necessary for ensuring enjoyable visits. In comparison, managers seemed to be more activity and supply focused in their perceptions of tourism management;
- a greater number of operators agreed that external as well as tourism activities can pose a threat to the well-being of the Park, compared with the managers who were divided in their opinions; and
- the tour operators indicated that there was a serious lack of information on the Park while the managers agreed that park information was more or less adequate. However, both groups agreed that a variety of information ranging from facilities available, regulations to proper behaviour, delivered using a variety of methods, was important to enhance enjoyment and appreciation of the Park's resources.

**Conservation Awareness**

Respondents in this case study showed a shared recognition of Marine Parks as areas of protection and conservation. This is a positive finding towards upholding the objectives and values formulated with the establishment of Marine Parks; namely perpetual protection and provision of opportunities for the appreciation of natural environments.

From this study, it is not known why operators took a more collective stand (that is, a larger number in agreement) in their perceptions on activities which present threats to the Marine Park, while managers were more divided in their opinions. Perhaps, the potential threats from certain external and tourism activities were not only to the Park environment itself but to the long-term economic sustainability of the tourism industry as well. On the other hand, perhaps managers felt they had some measure of control over the manifestation of certain threats like fishing activities, irresponsible tourists' behaviour and boating in the Park; they being the regulatory and enforcement body.

Nevertheless, there was unanimous agreement for stricter controls on development in the Park. Operators (80%) also showed a preference for the provision of a more undeveloped recreational setting with a minimum number of man-made structures and rated resort building as a threat to the park environment. However, final decisions on land use on the islands rest with the state government. It is hoped that the recent adoption of a national plan for the management of coastal resources by state governments (including the State of Kedah) will provide the foresight in ensuring strict control over development in Payar Island Marine Park.

Control of development within the Park alone is insufficient to ensure protection. Well planned development needs to be extended to adjacent coastal areas to curb erosion and sedimentation that may lead to the
Table 2. Awareness among operators of threats facing the marine park.

<table>
<thead>
<tr>
<th>Rated as a threat by &gt;80% of operators</th>
<th>Rated as a threat by 75% of operators</th>
<th>Rated as a threat by &gt;50% of operators (but less than 75%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Oil spill</td>
<td>• Commercial fishing</td>
<td>• Mining</td>
</tr>
<tr>
<td>• Resort building</td>
<td>• Illegal fishing</td>
<td>• Illegal dumping of waste from passing ships</td>
</tr>
<tr>
<td>• Litter/garbage</td>
<td>• Land-based pollutants</td>
<td>• Land clearance from the mainland</td>
</tr>
<tr>
<td></td>
<td>• Boats anchoring over reefs</td>
<td>• Recreational fishing</td>
</tr>
<tr>
<td></td>
<td>• Irresponsible behaviour of tourists</td>
<td>• Boating/yachting</td>
</tr>
<tr>
<td></td>
<td>• Trampling on corals</td>
<td>• Irresponsible</td>
</tr>
<tr>
<td></td>
<td>• Pilfering of coral, shells and other marine life</td>
<td>• SCUBA diving</td>
</tr>
</tbody>
</table>

Key:
• external activities
➢ tourism activities
destruction of reefs and other marine life in Payar. However, two activities, the clearing of land on the mainland and of mangroves, were rated by less than half of the managers and only half of the operators as potential threats facing the Park. Yet, the proximity of Payar to two highly developed islands, Penang and Langkawi and to the mainland increases its vulnerability to the threats of erosion, sedimentation and pollution. Very often, the openness of marine environments to threats resulting from development in adjacent areas is not realized until too late.

Coordinated and integrated planning and the formulation of complementary policies between both State and Federal governments are urgently needed. The setting up of a National Advisory Council for Marine Parks and State Consultative Committees for coastal planning and marine parks were for the purposes of consensus building and coordinated planning and development between State and Federal authorities. Despite this, the State Governments' environmental consciousness of the values of marine protected areas and their role in the protection of such resources are still fairly new issues on most States' agenda. State governments are beginning to realize that marine protected areas are the "golden eggs," as it is the States that stand to gain most from the economic benefits of tourism and conservation.

Planning and Management of the Park

Motives

Managers' lack of opinion over many of the motive items could be because they have less personal contacts with visitors and/or very little knowledge about the types of people who visit the Park. Yet, knowledge of recreational user motives is useful in the planning of recreational settings and interpretation programmes, minimizing conflicts and controlling inappropriate behaviour for the enhancement of the recreational experience at the Park. Since motives are useful in market segmentation, the incorporation of motives (compatible with park objectives) in the management of settings may be used to displace visitors with contradictory motives (for example, extractive motives) to other areas.

Crowding

Managers and tour operators were divided as to whether the Marine Park on the whole was crowded but both agreed the beach/picnic area as having a crowding problem. In contrast to operators' opinion, three quarters of the managers perceived the present number of visitors as adding to the enjoyment of the Park. These two groups were also divided in their agreement over whether overcrowding as a result of tourism was a problem for the Park.

While an increasing number of visitors does not necessarily equate with greater impacts from increasing use of the Park, the rising numbers do give rise to management concerns. From the mixed responses on perceptions of crowding in this study, there is a need to refine measurement of the concept, establish social and physical indicators associated with crowding and to establish if crowding is indeed an issue before appropriate management strategies can be formulated. Owing to the facts that multi-nationals visiting the Park may have differing perceptions on crowding, as influenced by their individual socio-cultural backgrounds, and that tourism in the Park is still largely popular (mass) nature tourism, the scope of research on crowding is very wide but yet untapped.

Management is still based on limitations imposed by physical carrying capacity. At present, researchers from the World Wide Fund for Nature (WWF Malaysia) are working with the Department of Fisheries (DOF) to establish some form of carrying capacity for the Marine Park. To take this one step further, the Maritime Institute of Malaysia, in collaboration with the DOF, will be organizing a workshop on impact management (in August 1996) in which the "Limits of Acceptable Change" framework will be assessed for use in Marine Parks, Payar included. Crowding will be among the issues to be discussed in one of the workshops on social impacts.

Management Activities

Both managers and operators rated the activity, strict enforcement of regulations, highly necessary for the protection of the environment. In addition, both groups agreed that visitors who do not obey park rules moderately to strongly lessened other tourists' enjoyment of the Park. Operators also felt strongly against irresponsible behaviour among visitors such as irresponsible SCUBA diving, trampling on or pulsing of corals and littering. Yet, it is insufficient to rely strictly on regulatory control of activities and behaviour. Effective management calls for a variety of resource and visitor management strategies.

In this study, all managers were in favour of activities categorized as enforcement/regulation and park services. It appears that these preferences are in line with the top-down and activity focused approach used in park management. While the majority of operators also agreed that activities under these two categories are important, they were not as much in favour of actions which restricted or limited visitor numbers or access in the Park (in comparison with managers who thought visitor management activities were almost as important). This result seems to indicate that tour operators perceived park management as the responsibility of the Authority and management, and if possible, should not hinder their tours. Such perceptions would be in line with tour
companies' objectives of providing satisfactory services in a highly competitive tourism market.

Both groups rated planning activities such as zoning, the creation of buffers and the placement of mooring buoys as important. These activities require a specific zoning/management plan for the Park, which none is in existence. Under the Marine Parks Policy, several types of zones were identified for the planning and management of the Parks but at present, zoning remains only on paper. The Parks are being managed under one general management system with little consideration for the differences in marine and geo-physical characteristics, tourism use and level of development, socio-cultural and demographic make-up and management philosophies of state and local administrations of individual parks. While it is within the legal capacity of the Minister of Agriculture to make regulations specifically or generally for zoning and management (Part IX, Marine Parks and Marine Reserves, of the Fisheries Act, 1985); zoning, if done at all, is still largely a physical planning exercise. Yet the benefits of zoning (whether the basis is temporal, spatial or type of use) are multiple, especially in view of the potential conflicts from increasing visitor numbers and use. It not only minimizes conflicts but stipulates the setting of clear and specific management objectives/targets for each zone to ensure systematic management.

Whatever the choice of management strategies considered most appropriate by the Authority to manage both resources and visitors, the cooperation of users is essential in ensuring effectiveness. This takes more than enforcing a rule, it takes education of and communication with users.

Based on the findings of this study, two areas of present management are of concern. First, the majority of operators rated park facilities, in particular, toilets, wastebins, picnic facilities, shelters and mooring buoys, as inadequate to extremely inadequate. On the other hand, managers in their supply oriented approach perceived these facilities as being adequate. As part of tourism management, managers should look seriously into these complaints by the operators. In view of the lack of land at the main beach area and further addition of facilities might lead to more congestion, managers might want to look at the alternative of adding such facilities at the other three beaches (but shorter strips) and diverting some of the smaller groups there. Of course, this alternative has to be weighed against the impacts that might result through the dispersal of users.

The second area of concern is fish feeding noted as one of the main attractions at Park. Presently, fishing feeding, at the beach or from the pontoon, is not a controlled activity. Both quantity and quality of food fed to the fish and juvenile sharks are not monitored. Impacts on fish health, natural aggregations, natural predatory behaviour and prey have never been studied at the Park. Yet, if one of the objectives of the Park is to protect nursery and breeding grounds for fish and other marine life, then the potential impacts of such an activity in light of increasing visitor numbers should be of concern and considered for future research.

**Park Interpretation**

Nature interpretation should be among the highlights of any visit to a Marine Park. Unfortunately, interpretive activities at the Park are very limited consisting of exhibits and displays at the Visitors' Centre. In addition, tour guides who accompany groups to the island are not trained to give nature interpretation other than to inform tourists the list of do's and don'ts at the Park. Although marine park tourism as been touted as offering ecotourism experiences, the results of this study showed that one of the essential elements of this type of tourism, the education/interpretation element, is missing. Operators indicated that Park information was still largely inadequate and at times, unavailable.

On-site environmental education and interpretation provide the competitive edge in the marketing of park and tourism services. Interpretation should not only comprise information on marine life found at the Park but should be used also to communicate park policies and management objectives to visitors. Better informed visitors who appreciate and understand the park environment facilitate the implementation of various management activities needed for conservation. In order for interpretation to be meaningful for the various nationalities who visit the Park, it has to be more than mere brochures prepared in multiple languages. A variety of methods to deliver education, in particular audio-visual and illustrative aids for easy comprehension, should be used. Interpretation also needs to cater for the various age groups at the Park and both managers and operators in the survey had indicated the importance of special marine education programmes for children and teenagers. In addition, by putting directional signs along trails and making available simple trail maps (sources of information rated as important but not available/inadequate) might encourage more visitors to participate in nature walks, an activity which operators reported as not among the favourites of visitors to the Park. This diversification of the recreation base might help alleviate some of the crowd pressure on the beach and in the water. In order to discourage improper behaviour such as breaking, trampling or pillaging of corals/shells and the harassment of marine life, separate code of practice for activities like swimming, snorkelling, diving and fish feeding need to be formulated and communicated to visitors.

Nevertheless, with the increasing numbers of visitors to the Park (many of whom probably has never visited a
protected tropical marine environment) and the perception of operators that irresponsible behaviour among tourists as a threat to the Park environment, it is timely to introduce more effective and meaningful interpretation programmes at the Park. In view of limited funds for such programmes, environmental education should not be the sole responsibility of the Park Authority, the private tourism sector should take on a more active role in the provision of interpretive services. There should be collaborative and ongoing efforts in the raising of awareness among visitors to the Park to gain their willing cooperation in protecting park resources.

Conclusion

This case study was a preliminary assessment of issues pertaining to tourism at and particular to Payar. In addition to national policies on coastal planning, ecotourism and conceptual plans which provide guidelines for the management of marine parks as one national system, case studies provide specific information and systematically address issues particular to each park. Results from this study stress an urgent need for a specific management plan for Payar; one which spells out clear management objectives to better address issues at the Park.

The Maritime Institute of Malaysia (MIMA) intends to forward these findings to the Department of Fisheries. It is hoped that these preliminary findings will help managers in decision-making and in setting priorities toward a more integrated approach in tourism and resource management. In addition, study findings are aimed at helping managers become more aware of (as well as realize the importance of) user preferences and needs, which thus far have never been incorporated into park management.

Effective management of marine parks require more than just an administrative-legal framework and the management of activities. It comprises consensus between managers and users of the resource, education of users and a variety of resource management strategies which consider the user-activity-environment link (a moving away from the traditional activity focused, top-down approach). Also, awareness of the need for conservation alone is not enough. There needs to be a common commitment from all stakeholders (Federal, State Authorities and users) through various forms of partnerships to protect this valuable resource. Finally, MIMA hopes that the findings of this study will stimulate more detailed research to keep track of the dynamics of the phenomenon and the environment and contribute to sound management decisions.

References


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ENDNOTES

1 Exchange rate used: USD 1.00 = RM 2.50 (RM = Malaysian ringgit).
2 Aside from generating foreign exchange earnings, the tourism sector also generated employment for approximately 120,339 people and attracted total investments of RM 1.62 billion (USD 0.65 billion) in 1993 (Cheah, 1995).
3 In the Sixth Malaysia Plan (1991–1995), the Government allocated RM 41.1 million (USD 16.4 million) for programmes on preservation of national/historical heritage and RM 43.6 million (USD 17.4 million) for beautification/cleanliness programmes and environmental protection, out of a total RM 534 million (USD 213.6 million) allocated for tourism development (Government of Malaysia, 1991, p. 247).
4 The list of motive items were adapted from previous research on recreation motives such as by Beard and Ragheb, 1983 and Kuentzel, 1990.
APPENDIX 1: Activities considered as threats to Payar.

<table>
<thead>
<tr>
<th>Threat</th>
<th>Managers (No of responses)</th>
<th>Operators (No of responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External Threats:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Commercial fishing</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>- Illegal fishing</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>- Small-scale fishing</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>- Mining</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>- Oil spill</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>- Illegal dumping of waste from passing ships</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>- Land clearance on the mainland</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>- Clearing of mangroves</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>- Land-based pollutants, eg. pesticides, sewage</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td><strong>Threats from Tourism/Tourists:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Recreational fishing</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>- Boats anchoring over reefs</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>- Boating/Yachting</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>- Resort building</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>- Overcrowding from tourism</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>- Irresponsible behaviour of tourists</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>- Irresponsible SCUBA diving</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>- Trampling on corals</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>- Pilling of coral, shells and other marine life</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>- Litter/garbage</td>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>

Note: Number of responses above indicate the number of managers and operators who agreed that the activities listed were threats facing the Park.