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**WHEN WILDLIFE TOURISM GOES WRONG:
A CASE STUDY OF STAKEHOLDER AND MANAGEMENT ISSUES REGARDING
DINGOES ON FRASER ISLAND, AUSTRALIA.**

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ABSTRACT:

Images on brochures, web pages and postcards lead to an expectation by tourists and visitors that interaction with Dingoes (*Canis lupus Dingo*) will be part of their Fraser Island experience. Yet, as the number of tourists to the island increase, so do the reports of Dingo attacks. The first recorded death from such an attack on Fraser Island occurred in April 2001, and was immediately followed by a government-ordered cull of Dingoes. This paper explores issues surrounding both this decision and the management strategies implemented afterwards. Based on interviews with a variety of stakeholders, many conflicting perspectives on human-wildlife interaction as a component of tourism are identified. The conclusion is drawn that while strategies for managing Dingoes are essential, if such attacks are a consequence of humans feeding wildlife and resultant wildlife habituation, then strategies for managing people are also necessary for this example of wildlife tourism to be both successful and sustainable.

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INTRODUCTION

When someone dies because of wildlife, and that wildlife is itself a tourist attraction, then wildlife tourism has “gone wrong”. When this wildlife is consequently destroyed, the sustainability of such wildlife tourism is questioned. The death of a nine year old boy on Fraser Island on 30 April 2001, as a consequence of a Dingo attack brought to public attention the issue of managing Dingoes in a manner that is sustainable; fulfils agency responsibilities for public safety; satisfies community expectations for the management of an iconic Australian species; and is compatible with ideals of wildlife based tourism.

This paper examines a range of stakeholder perspectives of Dingoes as a form of wildlife tourism on Fraser Island, and discusses human-Dingo interaction on the island to provide a context for the current management situation. Stakeholder perspectives reflect a diversity of opinions and attitudes:

It's all pretty straight forward really. The tourists are stupid. The residents short-sighted. The dogs starving. The rangers, who don't know how to look after the island, are over-worked and under-funded. And the government doesn't give a damn ... until somebody dies that is, and then they only give a damn about their political future.

This statement, drawn from a compilation of several voices, summaries, in a very simplified form, some of the key stakeholder attitudes. The important issues it raises are addressed in this paper.

SUSTAINABLE WILDLIFE TOURISM

‘Any living non-human, undomesticated organism in the kingdom Animalia’ (Moulton and Sanderson 1999:111) is generally considered to be wildlife. Wildlife Tourism (WT), as a sub-set of nature-based tourism,¹ can then be defined as tourism based on interactions with wildlife, whether in its natural environment or in captivity (Burns and Sofield 2001:2). Essentially ‘about increasing the probability of positive encounters with wildlife for visitors whilst protecting the wildlife resource’ (Reynolds and Braithwaite 2001:31), events concerning the management of Dingoes on Fraser Island would seem to be in conflict with this essential nature of wildlife tourism, as will be discussed.

WT contains all the traditional elements of tourism (such as tourists, hosts and resources), its distinguishing feature being its focus on wildlife as the tourist attracting resource.² The wildlife being discussed in this paper as a form of tourism is the Dingo (*Canis lupus Dingo*) on Fraser Island in Queensland, Australia.

The World Tourism Organisation (WTO) defines sustainable tourism ‘as a model form of economic development that is designed to:

- improve the quality of life in the host community
- provide a high quality of experience for the visitors, and
- maintain the quality of the environment on which both the host community and the visitor depend’ (cited in Ryan 2002:22).

¹ For diagrammatic representations of this sub-set see, for example, Reynolds and Braithwaite (2001:32).

² For further definitions of wildlife tourism see, for example, Shackley (1996).

WT, as with any other form of tourism operating in the world today, is encouraged to fit notions of perceived sustainability.³ Again, some of the management decisions concerning the Fraser Island Dingo population would seem to be in conflict with this notion and need to be examined.

FRASER ISLAND

Located off the Queensland coast, approximately 190km north of Brisbane, Fraser Island was given its European name after Captain James Fraser and his wife Eliza were shipwrecked there in 1836 (Sinclair 1990:76-77). The world's largest sand island, it is almost 125km long, 25km wide in some places, and over 160,000 hectares in area.⁴

Prior to European use of the island, the Butchalla⁵ Aboriginal people occupied the central region of Fraser Island (which they called Kgari) (Sinclair 1990:47). Fraser Island was gazetted as an Aboriginal reserve in 1860; however, this was revoked two years later due to the discovery of extensive stands of valuable timber on the island (1990:58). At the turn of the century, indigenous people from the island and groups from the mainland (Long 1970:95) were moved into the Bogimbah Creek reserve on Fraser Island which was under government control from 1897 – 1900 and 'thereafter as an Anglican mission supported by State subsidy until its demise in August 1904' (Evans 1991:71). Some parts of the Island are currently under Native Title claims.

³ For discussions on sustainability and its incorporation into discourse on wildlife tourism see, for example, Burns and Sofield (2001:2), Davis, Tisdell and Hardy (2001).

⁴ For further information on Fraser Island's geography and ecology see, for example, Bonyhady (1993), Burger and Knowles (1976), Carruthers et. al. (1986), Dargavel (1995), Hadwen (2002), Queensland Government (1991) and Sinclair (1990, 1994).

⁵ Also spelt as Badtjala (for example, in Sinclair 1994:51).

Sand mining began in the 1960s (Sinclair 1994) and the island has a long history of use for both mining and logging as well as cattle grazing (Dargavel 1995, Baker 1996:38). Queensland Parks and Wildlife Service (QPWS) took over as the governing body from the Forestry Department in 1991, and the island was declared a World Heritage Area in 1992 following development opposition by environmental groups (Sinclair 1994, Bonyhady 1993) and the Fitzgerald Commission of Inquiry (Queensland Government 1991).

METHODOLOGY

The voices presented here are those of our study participants and were collected between June and September 2001, with the most intensive periods of data collection undertaken during two fieldtrips to Fraser Island and the nearby mainland towns of Hervey Bay and Maryborough. A week was spent on the island for each trip, with the first trip taking place five weeks after the fatality, and the second trip three months later.

Fifty three interviews, varying in length from a few minutes to several hours, were conducted. The format for all these interviews was similar in that they were in-depth, semi-structured and open-ended. This format enabled people to tell us what issues were important to them, rather than us influence their voices by presupposing we knew what the issues were and asking for specific comment. Stakeholder groups sampled in this way include QPWS Staff, Tourists, Tour Operators, Resort Staff and Guests, Residents, and Traditional Owners.

Interviews were either recorded to tape and later transcribed, or reconstructed from notes taken during interviews. Transcripts were entered into the N-Vivo software package for the analysis of qualitative data and coded for theme and content. Personal observations were used to augment recorded data.

Material is also drawn from a compiled database containing approximately 835 newspaper articles and letters to the editor. The *Newstext* database contained *The Australian*, *The Weekend Australian*, *The Courier Mail*, and *The Sunday Mail* from January 1984 to July 2001.

THE FRASER ISLAND DINGO AS TOURIST ATTRACTION

Tourism on the Island

The number of visitors to Fraser Island has grown significantly since its declaration as a World Heritage Area in 1992, with current visitor numbers of approximately 350 000 per annum (see Figure 1).

Figure 1: A plot showing yearly visitor numbers to Fraser Island from 1985 to 1998.

This growth in numbers has been met by associated demand for better infrastructure and services to the island. As noted by Ryan (2002:18) about tourism in general, ‘Growing demand leads to more building, more development, and in that development, that which was originally sought, disappears.’

Whilst some Fraser Island residents and some long term visitors voiced concern about the environmental impacts of tourism on the island, to date, the key attractions that draw tourists remain.⁶ However, the tourist landscape has changed and the way different types of tourists use the island has differing effects. Long time users of the island, for example, recall years when they saw few tourists other than family campers and fishers. The island's focus for international tourists has dramatically increased since its World Heritage listing and this has brought with it not only more tourists, but more types of tourists.

Visitors to the island no longer need to own a four-wheel drive vehicle to traverse the beaches and the island's unsealed roads. Four-wheel drives can be hired from resorts on the island and on the mainland, tours taken by four-wheel drive buses, and the island can be accessed by both ferry and aeroplane. This has opened Fraser Island as a destination for backpackers, who commonly traverse the island by hiring a four-wheel drive in groups of 8-10, as well as conference delegates, and others. This increase in tourist numbers and types has been matched by an increase in human-Dingo interactions as Dingoes are increasingly marketed as part of the Fraser Island tourism experience.

Dingo: is it or isn't it an attraction?

The name 'Dingo' comes from an Aboriginal word 'dingu', and the species is commonly defined as 'a wild Australian dog' (Oxford Dictionary 1998:227).⁷ Thought to have been brought to Australia

⁶ There are studies being done on the degradation of Fraser Island's ecology, which is a key attraction for tourists. See, for example, Hadwen (2002).

⁷ Corbett (1995:163) would disagree with this definition as he states that Dingo populations remain in south-east Asian countries, such as Thailand.

by Indonesian traders some 4000 years ago, the Dingo has since developed characteristics that isolate it from its descendants in Asia (Corbett 1995).

The indigenesness of the Australian Dingo became a focus of public attention following the fatality in April 2001, as did the purity of the Dingoes found on Fraser Island.⁸ Because Dingoes and domestic dogs interbreed, there has been considerable hybridisation⁹ (considered the greatest threat, in terms of conservation, to the Dingoes) since domestic dogs were introduced by Europeans. The *Fraser Island Dingo Management Strategy* (EPA 2001b:4) states that:

Wildlife authorities recognise that because Fraser Island Dingoes have not cross-bred with domestic or feral dogs to the same extent as most mainland populations, in time they may become the purest strain of Dingo on the eastern Australian seaboard and perhaps Australia wide. Therefore, their conservation is of national significance.

Regardless of indigenesness or purity, the symbol of the Dingo has been used extensively to market Fraser Island as a destination for domestic and international tourists (Peace 2001: 175). Although Fraser Island as a tourist destination is made up of many attraction resources, images of Dingoes are featured on the majority of brochures, and on many web pages and postcards promoting Fraser Island. An underlying suggestion presented by these images is that a visitor to the island might reasonably expect positive interactions with Dingoes to be part of the visit experience.

For most visitors, Dingoes are part of the Fraser Island experience, with other significant icons such as the Maheno ship wreck, Lake Mackenzie and migrating whales:

⁸ For further discussion on the indigenesness and purity of Dingoes see Chipp (1983), Newsome and Corbett (1982, 1985), Woodall, Pavlov and Tolley (1993), and Woodall, Pavlov and Twyford (1996).

I guess it would be disappointing if I didn't see one, but it wouldn't be the end of the world ('John', Male Camper at Waddy Point, June 2001).

I expect to see Dingoes, ... obviously ('Mandy', Female Camper at Central Station, June 2001).

There's a number of icons to Fraser. The Dingoes are one of them. ... the Dingoes are big, we feature them on a lot of our marketing material ('Warren', Tourism Sector Employee, September 2001).

The Dingoes have not been marketed as a particular type of tourism product¹⁰ and, consequently, are not controlled within any particular type boundaries or expectations. This is may be illustrative of the vagueness of this product. One of the few boundaries imposed is that tourist interaction with Dingoes is non-consumptive,¹¹ by virtue of the fact that it occurs within a National Park and World Heritage Area where the Dingo remains a protected species.

Peace (2001) notes that the nature of Fraser Island is sold as safe, friendly and predictable, and that Dingoes are part of this package. It was not until some negative interactions between humans and

⁹ For an illustration of hybrid versus pure Dingo populations in Australia, see Figure 10.1 in Corbett (1995:166).

¹⁰ For a list of categories into which wildlife tourism can be placed see Reynolds and Braithwaite (2001:33-34).

¹¹ Where 'consumptive' tourism involves deliberate destruction of the wildlife through hunting or fishing, for example.

Dingoes in the late 1990s that the Dingoes image changed a little. Even then, the majority of symbols¹² continued to portray this animal as a harmless and friendly, fun-loving dog.

STAKEHOLDERS

The World Tourism Organisation (WTO) in its New Global Code of Ethics for World Tourism (1999) identifies stakeholders as tourism professionals, public authorities, the press and the media (cited in Ryan 2002:19). However, this obviously omits many other interest groups and individuals, including the host, or local/resident community and indigenous groups.¹³ For the purpose of this research, stakeholders have been defined, following Ryan (2002:20) as ‘simply any individual or identifiable group who is affected by, or who can affect the achievement of corporate objectives’.

Figure 2: A schematic representation of the various stakeholder groups with expressed interest in WT on Fraser Island.

Figure 2 shows some of the key stakeholders interviewed for this paper. The groups included are not exhaustive, but representative of the main stakeholders with expressed interest in WT on Fraser Island. While the list of stakeholder groups who participated in this study is not exhaustive, their perceptions, as reported to us and recognised by other stakeholders, appear to fairly represent the diversity of opinion expressed on the management of WT on Fraser Island.

¹² Symbols, such as the picture of a Dingo puppy on a t-shirt being sold on ferries and a poster used to advertise Kingfisher Bay Resort and Village to backpackers, perpetuate the image of Dingoes as cute and not dangerous.

¹³ For further discussion on consideration of the host community in tourism literature see Macbeth et. al. (2002), and for analysis on enhancing community involvement with WT see Ashley and Roe (1998).

Fraser Island is very much a national Australian icon. Consequently, there are numerous stakeholder groups wanting many different things from the island. All the groups identified here fit with Ryan's (2002:20) two-directional definition. While each group may have different interactions with Dingoes, they are nevertheless each 'affected by' and 'can affect' the objectives of managing Dingoes for tourism on Fraser Island. When viewing Figure 2 as a set of relationships, it is important to note that each group is not necessarily homogenous, although they are treated as such throughout this paper.¹⁴

HISTORY OF HUMAN-DINGO INTERACTION ON FRASER ISLAND

Aboriginal

Aboriginal groups used Dingoes to assist with hunting (Pickering 1992, Finlayson 1935, Thomson 1949), and in some cases the pups were raised like members of the human family (Lumholtz 1884, 'Racheal', Aboriginal Elder, September 2001). An Aboriginal elder recalled memories from her childhood on Fraser Island when women would suckle Dingo puppies and those puppies would grow up to guard and protect the human family, even protecting human children from other Dingoes ('Racheal', Aboriginal Elder, September 2001).¹⁵ Thus, for many Aboriginal communities, Dingoes were 'a utility as well as a pet' and their importance in Aboriginal culture has been recorded in rock art and cave paintings (Corbett 1995:19).

¹⁴ Throughout this paper we discuss each stakeholder group in a way that may suggest its existence as a single entity. Of course, it is not. When we comment on stakeholder support for an action, it is important to recognise that there may be variations in levels of support within the same stakeholder group. Any such group is, after all, made up of individuals. However, grouping individuals in this way provides a useful conceptual framework.

Despite this form of Aboriginal interaction with Dingoes it is still widely believed by Europeans that Dingoes are not as suitable for pets as the domesticated dog:

I think the fact that they are still a wild animal makes people think that we haven't bred that out of them. ... they've still got that wild streak in them, you can never trust them ('Len', Wildlife Manager, June 2001).

There are residents on the island that reckon they are pets so would probably still feed them. I don't think that's a very good idea because the Dingo being a hunting animal, has a leader of the pack and they all follow through. It's the leader of the pack now that's probably been in trouble and got himself, got his fingers burnt for doing that, and it's the next one in line that's probably going to come along and be another problem in 12 months' time ('Fred', Tourism Sector Employee, September 2001).

National Parks are trying to get them to go back to what they were, a native wild dog. ... But when the Dingoes first came to Fraser Island they were brought here by the Aborigines as their pets and so the Aborigines fed them whatever scraps were left over from their food ('Sarah', Island Resident, September 2001).

At the time of mining and logging

The presence of Dingoes on Fraser Island during its years as a venue for extensive sand mining and logging was of little national consequence, and use of the island for these forms of economic revenue

¹⁵ Corbett (1995:21) also notes that 'some, such as Aborigines in Australia ... even suckled young pups'.

was not dependent on the island's wildlife. This does not mean, however, that there was no interaction between humans and Dingoes during those years. Although mining and logging were dominant forms of use, tourism on a largely unregulated and small scale had commenced. There were also residents living on the island. Both of these stakeholder groups recall accounts of befriending Dingoes and of Dingoes stealing food, such as fishing bait or garbage ('Laurie', Island Resident, August 2001).

Since World Heritage

Fraser Island is one of thirteen World Heritage sites in Australia and while 'inclusion of a place on the World Heritage list can constrain developers, ... it can also produce tourist booms' (Baker 1996:41). For Fraser Island, the pattern of boom was clearly followed, as illustrated in Figure 1.

Increasing tourist numbers has coincided with an increasing number of interactions between tourists and Dingoes. Wildlife managers equate these typically benign interactions with Dingoes losing their fear of humans (EPA 2001b:3), though several of our informants suggested this is a two sided process with humans losing their fear of Dingoes also being an important part of the equation.

ISSUE ONE: HUMAN-DINGO INTERACTIONS

Some attempt has been made, by places like Kingfisher Bay Resort and Village, to record negative interactions ('incidents') with Dingoes on the island. Between 1996 and 2001, 279 incidents were reported of which 74 were rated 'insignificant' 70 were rated 'minor', 95 'moderate' 39 'major' and

1 'catastrophic' (EPA 2001c: attachment 8). An Environmental Protection Agency (EPA) study done in 1995 (2001b:5) showed that at least 10% of visitors reported a negative interaction with Dingoes on their visit to Fraser Island. This would then leave a potential 90% with a positive experience of Dingoes, yet this remains unreported.

The fatality does not seem to have been a threat to the tourism industry on Fraser Island. In June 2001, for example, the popular Lake Mackenzie camp ground was still typically full. Resorts reported a decrease in numbers in some types of tourists, for example a school groups cancelled at Kingfisher Bay Resort and Village, but also some increase, for example, people choosing to stay at resorts instead of camping or cancelling their holiday.

When we asked tourists and visitors if the fatal attack had changed their plans, few said it had. In fact, one family comprised of two adults and three children said they felt safer since the fatality because of the additional ranger presence on in the island. Of course, we did not speak to those who were not there.

For WT to be sustainable it is not acceptable to have wildlife a risk to human life, nor is it acceptable to eradicate the fauna visitors expect to see. While negative interactions are the focus of wildlife management little attention is paid to positive interactions.

ISSUE TWO: DINGO MANAGEMENT

Dependence on human foods leading to habituation of Dingoes is now largely considered the foundation for negative interactions between humans and Dingoes (EPA 2001b:5). Currently, both direct and indirect feeding of Dingoes is strongly discouraged and transgressors face heavy penalties.¹⁶ However, this has not always been the case. As one long term resident stated:

I have a photo of a sign from down at Central Station that says 'please throw all your food scraps into the bush to feed the Dingoes' ... It's probably about 20 years old. But that was what the sign said ('Sarah', Island Resident, September 2001).

Prior to the fatality, a *draft Fraser Island Dingo Management Strategy* (EPA 1999b) existed for the island.¹⁷ Although the plan had been in draft form for two years and was yet to be formally adopted, many QPWS rangers claimed key strategies were already being implemented. Impetus for drafting the plan may have come from the large number of Dingo attacks in the late 1990s.¹⁸

Accessing newspaper articles from 1998 and 1999, Peace notes the concern that 'marauding and scavenging animals would shortly constitute a major threat to the multi-million dollar tourist industry' (2001:187). For the sake of the industry then, the threat had to be removed. This highlights one of the inherent conflicts in WT. Where wildlife is only part of the attraction, as on Fraser Island and in fact in National Parks around the world, if it goes wrong then it can threaten the viability of the whole industry at that location.

¹⁶ For a discussion of issues surrounding the feeding of wildlife as a tourism attraction see Orams (2002).

¹⁷ This is not the only management strategy pertinent to Fraser Island devised by the EPA. A *Fraser Island World Heritage Area draft Camping Management Plan* (EPA 1999a), for example, also exists.

¹⁸ For information on these attacks, and their publicisation, see Peace (2001) and Lawrence and Higginbottom (2001).

The lack of a formally adopted strategy throughout the 1990s did not mean that QPWS had not been managing the Dingoes. The closure of dumps on the island in 1993, for example, was at least in part a measure to curb indirect feeding of Dingoes. Also, QPWS rangers had been culling individual Dingoes identified as exhibiting problem behaviour.¹⁹

The killing of a child by Dingoes, on Fraser Island in April 2001 has changed the way Dingoes are managed on the island, and this has implications for the continuation of Dingoes as a form of WT. According to the EPA, this event ‘dramatically redefined the risk that Dingoes pose to humans’ because it proved ‘that the most severe outcome, namely a human death, is possible’ (2001b:x). That such an outcome was possible was doubted by few of our interviewees:

It's something that's been predicted ... I felt sick in the guts basically ('Brian', Tourism Sector Employee, June 2001).

If someone asked me 'do you think a Dingo could do it', I'd say 'yes' but the bit that got me was the fact that it was such an old child and such a young dog. I always imagined that it would have been a older dog on a baby, maybe two or three years old ('Roger', Wildlife Manager, June 2001).

I think most people on the island probably expected it to happen, but not to a ten year old. I think they thought that if it was going to happen, it would be to a two - three year

¹⁹ For a description of ‘dangerous animals’ adopted by the EPA, and the selection criteria used to identify Dingoes before they are destroyed see EPA (2001b:12).

old, ... Just shocked - yes shit, it's happened ('Ted', Tourism Sector Employee, June 2001).

A risk assessment was undertaken shortly following the fatality, and a report on this prepared in May 2001 (EPA 2001c). The finalised Dingo management strategy document was released in November 2001 (EPA 2001b), incorporating recommendations from the risk assessment report. This document contains seven strategies, and includes a section on 'managing Dingo-human interaction' which states (2001b:10) 'the Dingo-human interaction will be managed by increasing Island-wide facilities and services that discourage Dingoes from interacting with the people ...'.

The Immediate Cull

Following the fatal attack, the immediate and very public response was a cull of more than just the two Dingoes involved in the attack. In total, 31 Dingoes were destroyed (EPA 2001b:3)^{20 21} and in terms of stakeholders voices the immediate cull is the easiest issue to discuss. It evoked a consensual voice in that none fully supported it. For example:

Oh my God, this has happened, ... on the island where I work, so I suddenly felt quite afraid for the Dingoes because ... I suspected that something quite bad was going to happen as a result and it did - the Dingoes were culled, 31 to be exact. My reaction after that started happening was that it was a very kneejerk reaction, I don't know if you

²⁰ The exact number of Dingoes on Fraser Island is unknown. The EPA (2001c:3) estimated the population as between 100 and 200 at the time of the cull.

²¹ This figure (31) was widely cited by many of the stakeholders, although some told us fewer Dingoes had been killed and others believed there had been more.

want me to continue with this. I felt quite sick. I did feel that it was quite a kneejerk reaction, the culling of those Dingoes. I'm glad it's settled down now, I was in fear for the entire population of the Dingoes for a while there ('Neil', Tourism Sector Employee, June 2001).

We are very much part of the problem and I don't think the Dingoes are at fault. Parks is bloody culling them but they're a part of the attraction here too. You can't just cull them ... When you go swimming in the ocean and there's sharks in the ocean that's their territory. This is Dingoes territory. It's a rare thing to see wildlife and you don't want to see it killed, it's a real special thing ('Alex', Resort Guest, June 2001).

It should never have happened ... It was wrong, they shouldn't have ever done that. Most of the Dingo attacks, prior to that little boy, were dogs that were either taunted or they were being fed and they wanted more food. There was an incident reported where an English backpacker got bitten at Lake Mackenzie. What they didn't report was that five minutes before she was bitten she had been feeding that dog steak. She ran out of steak so the dog bit her, so come on, be fair, be fair to the Dingoes. Then what happened was the National Parks went round and they shot anything they saw walking on four legs ('Sarah', Island Resident, September 2001).

It's sad, it's the biggest tragedy. ... That makes me really angry. I see all these t-shirts, they're all flogging the Dingo. I mean, that's what makes me so angry, because they use the wild animal and when his life is at stake, which is no fault of his, it's not the Dingo's

fault. That's what I'm keep trying to say, it's not the Dingo's fault that's happened here, it's the government and the people and the tourists ('Racheal', Indigenous Elder, September 2001).

It was Mr Beattie seen to be doing something, something grand because this had happened. That's all he's achieved, he hasn't achieved anything else other than getting rid of x number of Dingoes, pure Australian Dingo from Fraser Island ('Sarah', Island Resident, September 2001).

I don't think they should cull Dingoes. The culling afterwards was, I heard (on the radio) 'it wasn't a kneejerk reaction, it was a jerk reaction' ('Warren', Tourism Sector Employee, September 2001).

It's totally wrong ... I think they should cull the people who fed them personally - I think that's the real source of the problem ('Leanne', Female Camper at Waddy Point, June 2001).

It definitely wasn't the case of some rangers advocating the cull and some rangers completely against it, it was more of a case of some rangers definitely didn't like it and some rangers just accepted it ('Roger', Wildlife Manager, June 2001).

As noted by others, 'the short-term economic benefits often appear to take a central role in wildlife resource management ... and non-economic values ... are more difficult to measure' (Reynolds and

Braithwaite 2001:37). In this case, the presence of life-threatening Dingoes could have been a threat to Fraser Island's tourism, which is not solely wildlife based. Perhaps the cull could occur because the Dingo on its own is not seen as crucial for tourism on Fraser Island. As mentioned previously, the Dingo is part of an overall package and rarely singly responsible for tourist visitation to the island.

Government support for the cull may also have been motivated by the fear of being sued. At the time of writing, an English tourist was seeking \$250 000 in damages from the Queensland Government for injuries she received from a Dingo attack on Fraser Island in May 1998 (Jones 2001:4). And, as we are reminded by Peace (2001:187), Lindy and Michael Chamberlain 'received a compensation payment of \$1.3 million from the Northern Territory Government' that was considered a modest recompense for their legal and other expenses (Wilson 1999:13).

Perhaps there was also an expectation that a cull would not stop tourists visiting the island but that the continued presence of Dingoes might. This supports the idea that Dingoes on their own are not seen as a significant drawcard for the tourist dollar.

The government directive to wildlife managers to cull Dingoes was the initial response to the fatality. Wildlife managers were keen to point out that culling is only one of numerous strategies they have for management of problem Dingoes.

Fencing

The idea of fencing some key tourist areas to prevent human-Dingo interaction was raised after the fatality. ‘Dingo barrier fences are being or will be constructed at selected high risk picnic or camping grounds ...’ (EPA 2001b:10). This proposal met with little strong support from the people we interviewed. Most opposition came from a perception that the fences were unlikely to be effective, and may reduce human accessibility of the areas.

Well you can't really fence them out ... they'll get in ('Mark', Male Camper, Waddy Point, June 2001).

You could fence the park area off but then someone has only got to leave a bloody gate open once haven't they? Every camping area, like the parks area, would have to be fenced which is a big job. They've got enough to do without worrying about fences too haven't they? I think we've just got to teach the poor old dog that he's not a pet, he's not there to be patted on the shoulder ('Neville', Island Resident, September 2001).

You can't just say, “there is a problem when Dingoes and humans interact so let's put a fence between them”. Sounds great in theory, but in practice it's never going to work because you're not solving all the issues that have led to the problem ('Ted', Tourism Sector Employee, June 2001).

Hazing

Hazing, as defined by the EPA, means ‘any of the non-lethal methods used to deter Dingoes from frequenting an area and to re-instil in them a fear of humans, i.e. avoidance behaviour’ (EPA 2001b:20). In September 2001, a sign in the toilet block at the Waddy Point camp ground alerted campers to fact that local rangers were using hazing (in the form of shooting Dingoes with pellets). Such hazing forms part of the actions employed to implement Strategy 4 of *the Fraser Island Dingo management plan*. The appropriateness, and effectiveness of hazing was again met with mixed responses from stakeholders interviewed. Several commented that because Dingoes were very clever, the only thing they would learn would be to avoid people wearing ranger uniforms.

Whilst these types of measures (fencing, hazing, culling) are important when managing Dingoes, on their own they are not enough. As recognised in the current strategy (EPA 2001b), there is also a need to manage humans.

ISSUE THREE: HUMAN MANAGEMENT

We asked ‘how do you manage Dingoes?’, and the majority of respondents considered it more important to manage people:

I would say it's a 100% human problem. You've heard of the term wildlife management - wildlife don't need managing, people need managing ('Ted', Tourism Sector Employee, June 2001).

(How do you go about managing Dingoes?) By managing people in this situation. You can't really manage the Dingoes, they manage themselves. If we leave them alone, they'll do a good job of it ('Bill', Wildlife Manager, June 2001).

One of the main problems is people, We are very much part of the problem ('Angus', Male camper, Waddy Point, June 2001).

You can't really blame the Dingo for it, can you? It's our fault ('Neville', Island Resident, September 2001).

The need to manage people is by no means a new idea, yet it remains a neglected one. For example, in 1966 Aldo Leopold noted that 'the problem with game management is not how we shall handle the deer – the real problem is one of human management' (p197). Duffus and Deardon (1993) claim that for management to be successful 'both human and ecological dimensions must be understood, and balanced, in the planning stages.' Where this has not been done adequately, as seems to be the case on Fraser Island, it falls into the trap forewarned in Duffus and Deardon (1993) that 'to ignore either is to invite conflict that will result in degradation'.

Who is the problem?

The worst one was a tour operator at Lake Mackenzie feeding the Dingoes there. That was probably the worst incident, because it's someone who should know better. Backpackers are the other bad ones: a bit of food on the ground, let's take a photo of it.

I still think the best story is the backpacker who has a bit of food in his mouth, for the Dingo to take it out of his mouth ('Ted', Tourism Sector Employee, June 2001).

As noted, the increase in visitor numbers to the island has been paralleled by an increase in the recorded number of 'Dingo incidents'. However, the problem rests not just in the number of tourists, but in what those tourists are doing. On the occasions we visited the island there were few visible Dingoes, which may suggest the strategies being employed by QPWS are successful in minimising human-Dingo interaction. This gave us little opportunity to witness such interactions; however, we were able to gather stories about interactions that had occurred prior to the fatality and proceeding cull.

A fellow researcher on the island saw a group of young male backpackers hand-feeding sausages to Dingos at Lake Mackenzie. When the tourists tired of the interaction they had instigated, they threw beer cans at the Dingoes to scare them away (Hadwen, pers. comm. 2001).

The first type of people to be identified as exhibiting problem behaviour by stakeholders were often backpackers:

First time tourists. That's your problem - tourists. The regulars know the problem and stick to the rules but the tourists that are here think 'that looks cute - if I find a bit of food I'll give it to them to get a better shot'. They're hopeless ('Sean', Male Camper at Waddy Point, June 2001).

[Backpackers] They're trashing the place. I think that's another thing, like a lot of them come over here and hire a 4 wheel drive as a group and everything and it's hard for some of them to understand how important it is to really protect this place ('Ron', Male Camper at Waddy Point, June 2001).

However, these were certainly not the only group identified, and who was identified depended very much on who was being interviewed, in that it was always another stakeholder group that was considered to be at fault. For example, tourists identified other types of tourists; campers singling out backpackers, fishers singling out campers, and backpackers singling out people in resorts. This blaming of the 'other' is exemplified by the fact that no-one we spoke to said they had ever fed, or would ever feed, a Dingo ... even campers or fishers who had been visiting the island for several years. However, many said they had seen others feed.

In addition, QPWS rangers identified tourists, mostly backpackers, and residents as being responsible for inappropriate interactions with Dingoes. Residents blamed tourists, firstly backpackers, and rangers. Residents also said they had never fed Dingoes, which was an interesting consensual voice within this stakeholder group. No one told us they had ever fed even though some lived in close proximity to Dingoes, reporting Dingoes sleeping on their verandahs, travelling in their cars and playing with their children. Some even had individual names for Dingoes.

Managing People is Not Easy

While we are concerned about the approach that seeks to eliminate all interactions (both positive and negative) between humans and Dingoes we do not dispute there is a need to minimise negative interactions, both for the sake of the humans and the sake of the Dingoes. To achieve this there is a need to manage Dingoes and manage people. However, it has long been noted that while ‘Wildlife management is comparatively easy; human management is difficult’ (Leopold 1966:197).

Historically, governing bodies such as QPWS have been less focussed on managing people and more focussed on managing wildlife, as their title would suggest. However, parks are about people and as WT increases, such organisations will face management issues that require increasing dealings with people.

Stakeholder Conflict

In terms of the head rangers and the rangers themselves, ... some of them are OK, but most of them pretty much have the attitude “we're not really interested in commercial concerns, we're here as the protectors of this resource and we're going to treat you with the contempt you deserve”. And that's certainly a common perception among tour operators, very common (‘Warren’, Tourism Sector Employee, September 2001).

One of the key barriers to managing people appears to be the level of tension that exists between some of the stakeholder groups. This conflict is not new, perhaps having always been there, but the Dingo issue seems to have exacerbated it and it poses a challenge to sustainability.

Tensions can arise between tour operators and protected area managers, as exemplified by the quote above. On one side are the ‘operators seeking greater and closer access to wildlife’ (Reynolds and Braithwaite 2001:40), and the desire for greater and closer access is blamed as the motivation behind feeding, feeding blamed for habituation, habituation blamed for loss of fear (of both Dingoes of humans and humans of Dingoes), and loss of fear blamed for the increased problem behaviours of both humans and Dingoes.²²

On the other side are the ‘managers seeking to restrict access and increase the distance between visitors and wildlife’ (Reynolds and Braithwaite 2001:40). Manager motivation for this stance comes from a desire to protect both the wildlife and the humans, as well as to decrease the likelihood of publicity over negative interactions. This kind of stance is based on the premise that interactions can only be negative, as reflected in the EPA documents (2001a, 2001b, 2001c).

The most obvious conflict probably exists between QPWS and Fraser Island residents:

It's more that a bubbling discontent, it's downright hostility to National Parks and management (Fraser Island resident quoted in The Australian newspaper 1/12/2001, Wilson 2001:3).

This was very evident at a Fraser Island Association (FIA) AGM held on the island in September 2001. One female resident was concerned that as a consequence of the fatality QPWS authority over the island could be expanded to include freehold areas, and thus they could ‘come into our homes and tell us what to do’.²³

²² For a sequence of events believed to lead to an attack by a Dingo on a human, see EPA (2001b:5).

²³ Current legislation ensures that QPWS can not cull Dingoes in the town sites on the island. However, the statement that ‘negotiations will be initiated with the Maryborough and Hervey Bay City Councils to establish co-operative

One of the strategies residents and QPWS disagree on is the allocation of areas where Dingoes could be regularly feed. Some residents see this as a way of solving the problem of hungry Dingoes scavenging for food and becoming aggressive:

I believe, and there's a number of us believe this, if they set up some form of feeding program, ... where they will get x amount of food, in a place, every day that will stop the problems ('Sarah', Island Resident, September 2001).

However, this is something QPWS has strongly rejected. 'A number of alternative management actions within the overall strategy were considered but rejected ... (including) establishing feeding stations to supplement the diet of those Dingoes that are perceived by some people to be unnaturally malnourished' (EPA 2001b:6).

The need for feeding stations, according to some residents, arose because QPWS closed the rubbish dumps on the island, thus depriving the Dingoes of a crucial food source. Differences of opinion on this strategy have also caused conflict between residents and QPWS.

That was the end of the wild brumbies (feral horses) on the island, so there's another source of food gone for the Dingoes, so what was left was the dumps. ... That was where the Dingoes were being fed, so never at any time have these Dingoes had to live off the land because they've been fed. We're going back generations so now all of a sudden, National Parks decide that all the rubbish that comes onto this island has to go off the island, so we lose our dumps and that was when we started to have problems

management and enforcement arrangements across all tenures' (EPA 2001b:10) could be interpreted as seeking a change to this legislation and thus bringing actuality to the residents' fears.

with the Dingoes because they needed food. You go back before those dumps were removed, we never saw a Dingo in town here in daylight ... we've got Dingoes now that will walk up onto the verandah of the resort there, they're hungry, they're looking for food. They're starving and National Parks attitude is, if they starve, well they'll die out or only the strongest will survive and then of course we had this incident up at Orchid Beach where that little boy was mauled. That was tragic, it should never have happened and if National Parks had done their job, that would never have happened ('Sarah', Island Resident, September 2001).

The big difference was when they closed the dump over the back. The Dingoes used to feed at the dump. They'd be lying there under the trees and they weren't worrying about coming to the beach. The dumps got closed, where do the hungry ones go, where the feed is ('Henry', Island Resident, September 2001).

The overall perceived competency of QPWS by residents (that they are “not good at doing much”) is strongly related to the perceived competency of their handling of Dingoes. The history of this conflict dates back some years as many residents think the island was better run by its previous managers, the Forestry Department.

On each side of this tension coin exists a lack of understanding about the other side. Reynolds and Braithwaite (2001:40) pose this as a failure by each party to understand ‘the constraints and pressures on the other.’ As both QPWS and Fraser Island residents are key stakeholders when it comes to Dingoes on Fraser Island, their relationship is crucial to the sustainability of WT. It is therefore

essential that these people cooperate, for the sustainability of the natural resources on the island and for the tourism that is dependent on those resources.

Summarising discussions of ways to control tourist interactions with wildlife, Reynolds and Braithwaite (2001:36) highlight three types of strategic methods:

- 1) physical and regulatory methods,
- 2) economic strategies, and
- 3) educational strategies.

They note that ‘these strategies generally seem to try to control the number of tourists, and are forms of regulating numbers of people to carrying capacity of a site, rather than the interaction itself’ (Reynolds and Braithwaite 2001:36). That is, all three strategic approaches are aimed at regulating tourist numbers rather than tourist behaviour or interaction.

Limiting visitor numbers

On Fraser Island, one of the physical and regulatory methods proposed is to limit tourist numbers. ‘The possibility of limiting visitor numbers to the island or at specific locations on the island (including the imposition of time restrictions) will be investigated ...’ (EPA 2001b:11).

In general, tour operators reacted negatively to the proposal to limit tourist numbers, claiming that it is unnecessary:

I don't believe in locking wilderness up, I don't believe in locking anything up. Because to me, it's like having a painting and putting it in a cupboard, it's not of any use to

anyone ... I think a million people could visit Fraser Island a year and it would be sustainable definitely ('Warren', Tourism Sector Employee, September 2001).

Residents also were generally against the idea of limiting tourist numbers. This reaction may be in part a response to the fact that many residents are engaged, either directly or indirectly, with the tourism industry on the island and thus have an interest in the income it generates.

We've got a hell of a lot of room on the island ... even in the peak of the tourism season there is still plenty of room for people. We could still find places that we see no-one. I don't think the island has reached anywhere near its capacity ('Neville', Island Resident, September 2001).

Very hard to police. Tour operators want to make money, don't they? ('Henry', Island Resident, September 2001).

Who do you discriminate against? That's what it all comes to. That's what you call discrimination, who are they going to pick out ('Justine', Island Resident, September 2001).

In contrast, tourists greeted the idea of a cap on visitor numbers much more enthusiastically. This more positive acceptance by individual tourists may stem from the fact that increased numbers of

other tourists decrease the pleasure of their own experience. It is related to the individual perception that 'I am not the problem, but others are'.

Get rid of the people altogether. The clearest way would be to stop people coming on the island ('Sean', Male Camper, Waddy Point, June 2001).

I'm a bit like, if they, from that day on, just sort of closed it off and said 'sorry no people allowed' and that would mean at that time I would never have seen Fraser Island, I would have thought, well fair enough ('Angela', Female Camper, Central Station, June 2001).

Education

Educational strategies continue to be pursued, and since the fatality the proposal has been to further increase 'public education ... to discourage inappropriate visitor behaviour' (EPA 2001b:8). Very few disagree with this strategy, although there are differences in opinion over forms the education should take and how it could be implemented most successfully. Some think the current education methods are satisfactory:

The signs are good - the noticeboards and things are good. And there's a lot of information. I think it's good, that's the only way that you're going to educate people so in the future they won't have this sort of problem ('Claire', Female camper, Waddy Point, June 2001).

Just keep educating people that come onto the island. Educate people and use of enforced fines. They started fining people and it's hard to catch people in the act but if you do, make sure you enforce the fines. That's all you can do ('Ron', Male camper, Waddy Point, June 2001).

Others are more despondent, recognising that although educational strategies have been in place for some time they did not prevent the fatality in April 2001:

It's a matter of people understanding and educating the people, that the hardest thing they could ever do I suppose. The hardest thing to do is educate people ('Angela', Female camper, Central Station, June 2001).

The public education is the big thing with Dingoes, it's not going to change overnight, but if you can educate people, and especially the non-feeding side of things I guess, people will probably be a lot more aware of Dingoes. It was always said, ever since I've been coming up here, don't feed the Dingoes ('Diane', Female camper, Central Station, June 2001).

Fear

Dingoes have been here for a long time and I think it's the people that are coming across, people are losing their fear of Dingoes, people are behaving badly around

Dingoes, that has caused the whole problem ('Donna', Tourism Sector Employee, June 2001).

As previously stated, the EPA (2001b:3) blame Dingoes loss of fear of people for the development of 'aggressive tendencies and/or destructive behaviour'. This was recently announced by the Queensland Premier, Peter Beattie, who said the State Government was determined to ensure such a tragic loss of life did not happen again: 'Some Dingoes on Fraser Island have lost their natural fear of humans because they have been fed by people' (EQ 2001).

Laurie, a long time resident of Fraser Island, also believes that Dingoes need to be made afraid of humans again. 'They have lost their fear, and there is scientific support for this from Dr Corbett, and the Australian Mammals Curator at Melbourne's Zoo' ('Laurie', Island Resident, August 2001). However, this loses sight of the fact that human-Dingo interaction involves two actors; both humans and Dingoes.

If the solution is fear, then the strategies in place (such as hazing) to force Dingoes to fear humans, from our observations and the comments of informants seem to be working. What is now needed is a concurrent strategy to make people fear Dingoes.

Fines and fees

The economic strategy employed in an attempt to break the sequence of events leading to an attack was an increase in fines issued to island visitors and residents for inappropriate behaviour.

Tough new fines are among nine major recommendations in a Dingo risk management assessment report prepared by QPWS. ... "These comprehensive and tough new measures are focused squarely on educating people against feeding Dingoes, and punishing those who persist." On-the-spot fines for feeding ... will increase to \$225. Maximum penalties for feeding ... will double from \$1500 to \$3000. Individuals caught feeding Dingoes will be directed to leave the island immediately and commercial operators caught feeding Dingoes will lose their commercial tour operator permits (EQ 2001).

In this case, fines are being used as an economic sanction aimed at modifying human behaviour. Visitors to the island also pay a fee to QPWS. Fraser Island is world renowned for its high quality nature experience. Following the argument of Reynolds and Braithwaite (2001:39), that 'the higher the quality of the experience the greater the need to pay should be', it would not seem unreasonable for visitors to Fraser Island to pay more both for the privilege of being there and for any activities they undertake that harms the experience for others. 'The higher the impacts on the environment the greater the need to pay' (Reynolds and Braithwaite 2001:39). Fraser Island is recognised as a World Heritage Area because of its unique and fragile environment; therefore, the potential for impact is high. If a consequence of habituation of Dingoes is that they are culled, then the human impact on this part of the environment is certainly high.

One reason given for why the *draft Dingo management strategy* had not been acted on sooner related to the lack of funding allocated to QPWS activities on Fraser Island:

The heart of the issue I guess, is that there are not enough rangers on the island. For the whole island, there is something like 30 national park rangers with bugger-all infrastructure. Of course, they just don't have the time or the money to implement the procedures that are already there ('Ted', Tourism Sector Employee, June 2001).

Co-existence

The construction of management policies based on mechanisms like access permits, development and building permission, zoning, or by limiting access by restricting flight patterns, maintaining short runways, limiting road development and the whole panoply of planning restrictions that governments have at their disposal are, by their nature and intent, not neutral in impact (Ryan 2002:18).

'Such planning mechanisms have social implications. Planning controls of the type described are controls over communities' (Ryan 2002:18) and it is this control that is objected to by the residents of Fraser Island.

The conflict between residents and QPWS is part of the Dingo management problem, and this conflict itself stems from the different tenure systems existing on Fraser Island. Despite the island being part National Park (Great Sandy) and part World Heritage Area, people still live on the island. This situation occurs on the mainland also, where park boundaries border on residential areas, and it has long been recognised that park problems (therefore management) do not begin and end at park boundaries.

There is a need to look for ways to empower stakeholders and make them more satisfied with the processes of management. This could happen through their involvement in decision making and participation in strategic planning, and may alleviate some of the tension caused by an approach that is viewed by some as exclusionary, and top down. 'Conservation is only as strong as its community support' (Reynolds and Braithwaite 2001:32) and thus those seeking to manage for the betterment of conservation need to encourage community support. One way to get that support is through involvement of the community.

This issue facing Fraser Island is not isolated or unique, and it is likely to be of increasing importance in the future. According to Ryan (2002:23), a current issue in tourism relates to the fact that 'government bodies need to recognise that existing governmental mechanisms for the representation of stakeholders may be insufficient.' Although Ryan recognises the problem, he also notes there is no quick solution, 'In short, there are no easy answers, but neither is failure to recognise the issues an answer' (Ryan 2002: 24).

CONCLUSION

The records suggest that Dingo 'incidents' on Fraser Island have increased over recent years. Applying a cause and effect model, the most obvious thing that has also changed in those years is the parallel increase in number of visitors and tourists to the island. There are more visitors and more incidents, therefore a conclusion could be drawn that less visitors would result in less incidents. Unfortunately, a solution is not that simple.

A reduction in visitor numbers is unlikely to eventuate, given that the trend of the last ten years has been for numbers to increase. It is reasonable to assume that numbers will continue to increase unless some external intervention is taken to prevent such an outcome. Limiting numbers is not as straight forward as it sounds. It involves removing a taken for granted freedom (i.e., access to the island), one that is assumed as a human right.²⁴ It would also mean a curtailing of economic growth.

Also, if human behaviour is identified as a key problem in the management of Dingoes, then the total number of visitors would seem of little consequence. The number of occurrences of aberrant behaviour is the issue that need to be addressed.

Education has been tried and since the fatality this campaign has been stepped up, but there is so much that tourists could be educated about at any given destination that it can become overwhelming and tourists may simply choose to ignore it. It is critical to properly evaluate whether the QPWS education campaign has impacted on the behaviour of visitors to the island. Unless these campaigns are succeeding, current management efforts may do little in mitigating the risk of further catastrophes.

The creation of order and harmony is meant to be the aim of management. The cull of 31 Dingoes on Fraser Island caused disharmony:

We got a staggering amount of responses from the public in terms of letters, in terms of complaints. We got a lot of complaints and a lot of queries from conservation groups.

The Minister and the Premier, I believe, stated that they've never had an issue that

²⁴ We have not discussed ethics and values of human versus animal rights in this paper, although it may be pertinent to the debate and is worthy of further research.

they'd had so much hate or so much concern about, and they had received death threats from people involved So there were many people staggered by the response to the killing, highlighted by the fact that we had rangers on TV with guns at the heads of Dingoes ('Len', Wildlife Manager, September 2001).

The management of Dingoes, as a form of WT on Fraser Island, embodies a complex system, and needs to be managed as such. Current Dingo management is based on the premise that all interaction is negative, and therefore all interaction should be avoided, when this is clearly not the case. The strategies for eradicating negative interactions also limit positive interactions, which are part of the essential nature of WT. A model for co-existence between various stakeholders, and between humans and Dingoes, is needed to reduce the conflict that is an impediment to both good management and sustainable WT. Currently, the management focuses on creating fear in Dingoes. That human-Dingo interactions involve two parties requires greater recognition, and management of both is required for the safe and sustainable continuance of Dingo-tourism on Fraser Island.

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FIGURE CAPTIONS

Figure 1: A plot showing yearly visitor numbers to Fraser Island from 1985 to 1998 (Queensland Government Department of the Environment 1998).

Figure 2: A schematic representation of the various stakeholder groups with expressed interest in WT on Fraser Island.

Figure 1

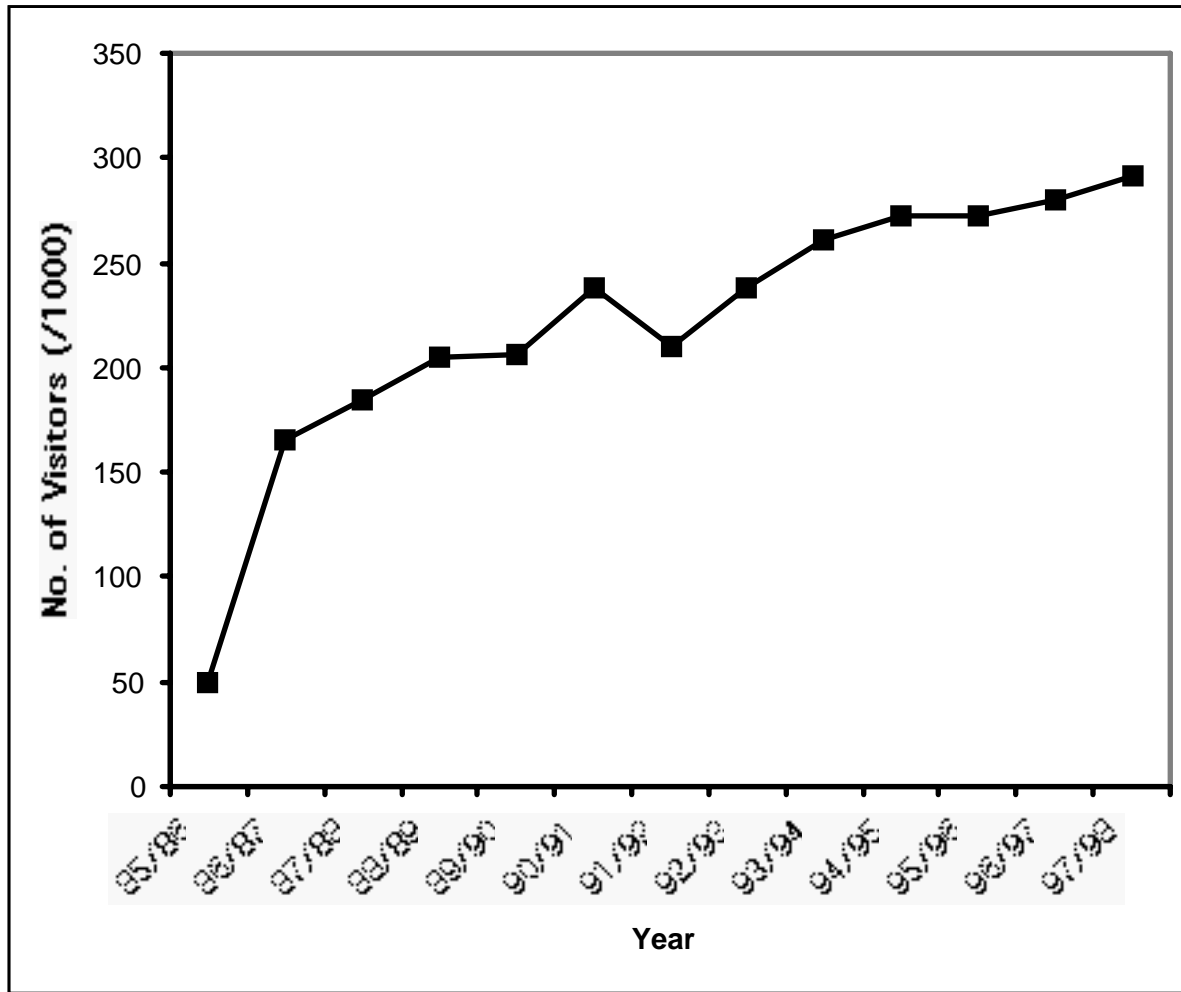


Figure 2

