

## TOURIST DEVELOPMENT AND FRINGING REEFS

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Tourism is the major commercial activity within the Great Barrier Reef Region and is currently showing impressive growth. So, what is the connection between fringing reefs and tourism? This paper explores this interrelationship.

The focii of this paper are the two major vehicles for commercial tourist access to the Great Barrier Reef Region - island tourist resorts and commercial passenger vessels. Mainland fringing reefs are not considered in order to limit the scope of this paper, to something manageable but it must be noted that there, are a number of mainland sites with current and potential recreation importance, including Cape Tribulation reefs, King Reef and Dingo Beach. Also not covered is private recreational use which occurs from motor boats and yachts.,

### HOW IMPORTANT ARE FRINGING REEFS TO TOURISM?

This question is central to the paper (and this workshop) because if the current role of fringing reefs can be established then the potential for the tourism/fringing reef relationship can be explored. Unfortunately the question is not easily answered given current knowledge, however this paper seeks to canvass the issues.

Of 21 resort islands within the outer boundaries of the Great Barrier Reef Region, only 3 are coral cays. The remainder are continental islands with varying degrees of fringing reef development. Thus island resort tourism is very much focussed in locations with fringing reef resources. Of the over 280 commercial passenger vessels operating in the Great Barrier Reef Region, around 60% operate to areas where fringing reefs are present. The overwhelming majority of these vessels operate in the Whitsundays where bare boat sailing is growing in popularity, as are day trips amongst the islands.

Altogether, the availability of resort and vessel infrastructure in the vicinity of fringing reefs provides an estimated 1.5 million visitor days per annum (800,00 on vessels, 700,000 at resorts), or 75% of the total estimated visitor days provided by island resorts and commercial passenger vessels in the Great Barrier Reef Region in 1984/85. (Driml in prep.)

It would be most unwise to claim that all this tourism occurs because of fringing reefs. A number of factors combine to create demand for tourism and facilities just as a combination of variables govern supply of facilities.

On the demand side, we must explore what influences people to travel and what attracts people to holiday on the Great Barrier Reef in particular. As with any group of people we find a variety of reasons for their destination choice.

Underlying and determining consumers' -travel behaviour are a number of economic variables which influence the demand function including the price of the holiday, price of other destinations, etc. Currently the exchange rate is affecting the price of holidays in Australia vis a vis overseas holidays.

Why do people visit the Great Barrier Reef? Evidence from tourists staying on resort islands is that in response to the question "what were the two most important features that attracted you to this island?", the features nominated were placed in the following rank order:

1. Warm sunny weather
2. Barrier Reef
3. Relaxing quiet place
4. Beach, water activities
5. Entertainment

(Cameron McNamara 1986)

The top ranking reason has nothing to do with the Great Barrier Reef but has everything to do with the tropical location. The Barrier Reef does figure as the next most important attraction. However this begs an important question - what do respondents mean by the Reef? Do they mean the outer coral reefs, fringing reefs or islands? Did the people answering this question expect to see coral reefs on their holiday and did they in fact see any?

Many questions exist as to tourists' attitudes to and perceptions of the "Great Barrier Reef" and some of these are being addressed by research currently underway, commissioned by the Great Barrier Reef Marine Park Authority. Meanwhile we must look to the evidence provided by reef use patterns.

That a variety of demands exists is now well established in tourism literature. It is important to note that tourists are no longer grouped simply by demographic variables (age, income, etc.) but may meaningfully be grouped according to their attitudes to and demands of a travel experience. This is important with regards to activities chosen on holiday. Within the Great Barrier Reef Region there is a range of resort types and activities available. Resorts show market segmentation ranging from the young people's market to 'exclusive' executive hideaways. Day trips cater for yet other markets including less affluent people on driving holidays to North Queensland. Activities range from those appealing to the adventurous (SCUBA diving, paraf lying) to those suited to sedate tourists (sunbaking, reef walking).

To sum up, on the demand side there are a variety of attractants to tourists who visit the Great Barrier Reef, one of which is the reef itself. We must look for further evidence of whether fringing reefs play a large or an insignificant part overall in attracting tourists to the resorts and boat trips.

On the supply side, were fringing reefs important in decisions to locate resorts on continental islands? Historically, many of the island resorts have developed on islands which were previously used for agriculture. Location and access are obviously important. The continental islands are generally closer to the mainland than coral cays. Also as tourist destinations have developed, a clustering of resorts has occurred, particularly in the Whitsundays.

None of this has anything to do with fringing reefs. In fact fringing reefs prove an obstacle to boat access to some resorts. However the bottom line is that resorts will only stay in business if they attract tourists and fringing reefs may have something to do with the attraction of these island resorts.

#### 'ACCESS TO FRINGING REEFS:

What of access to and activities 'on fringing reefs? Island resort guests and boat passengers do visit fringing reefs. The extent to which visitors to particular resorts can access fringing reefs varies with the extent of reef, topography of the island, and facilities to visit the reefs. What tourists see depends very much upon the visibility of the water. This is generally poorer closer to the mainland and areas of runoff, and varies with weather conditions. The 'aesthetics' of reefs within the Great Barrier Reef in the eyes of tourists often has nothing to do with ecological diversity but depends upon the presence of colourful coral and fish.

#### Island Resorts

Fringing reefs may be accessed from island resorts simply by reef walking, swimming, snorkelling, or diving from the island. Most continental islands have some coral formations with attendant fish. Organised trips including diving courses may be arranged, and resorts may provide "hardware" for viewing coral in the form of glass bottom boats and semi-submersible vessels.

Some island resort operators prefer to concentrate on reef access to "outer" reef sites and do not place much emphasis on their local fringing reefs.

#### Bareboating

The majority of bareboat sailing (where groups hire a boat and follow their own itinerary) occurs in the Whitsundays, within the area defined by the concentration of islands. This is an area rich in fringing reefs. Bareboat parties are encouraged to visit a number of different anchorages. They are in a prime position to access the fringing reefs of the area, and they do so.

Parties are supplied with information on anchorages and sites to visit - particularly through the publication '100 Magic Miles of the Great Barrier Reef' by David Colfelt (1985) which has descriptions of the locations and quality of reefs.

#### Day Trips

Again the Whitsundays is the focus of daytrips where fringing reefs are important, but day trips also run to Great Keppel, Fitzroy, Magnetic and Lizard Islands (the latter, 'by air). The trips which offer perhaps the best opportunity to experience fringing reefs are to the underwater observatories on Hook Island in the Whitsundays and Middle Island in the Keppel Islands. A semi-submersible vessel is now operating on the fringing reef around Black Island (Bali Hai) in the northern Whitsundays. The 'semi-sub' trip lasts for an hour and offers close views of this reef. A 'semi-sub' was also operating on the Fitzroy Island Reef for some time but has been moved to an 'outer' reef site.

Other trips offer opportunities to swim, snorkel and dive on fringing reefs.

## Camping Trips

Island drop-offs and "safari" trips involve visitors camping on islands from where they may access fringing reefs. Again, the majority of these are in the Whitsundays.

## 'TRENDS IN TOURISM

Commercial tourism via island resorts and commercial passenger vessels is growing. The tourist industry in North Queensland has seen notable growth in the last three seasons in particular and is becoming increasingly important in the North Queensland economy. Some pertinent figures are quoted below.

### Island Resorts

In 1984/85, the 24 island resorts of the Great Barrier Reef Region attracted 151,000 visitors who stayed 790,000 visitor nights (Cameron McNamara 1986). The annual increase in visitor nights has averaged 11% from 1976/77 to 1984/85 and accelerated with a 17.5% increase in 1984/85 over the previous year (Australian Bureau of Statistics). The current stock of rooms is around 1600. Expansion plans in this sector are impressive with a doubling of the number of rooms reported to be in progress or planned. (Peat Marwick Mitchell 1986). The expenditure by guests of island resorts was around \$84 million in 1984/85, an increase of 33% in real terms over the previous year (Cameron McNamara 1986).

### Commercial Passenger Vessels

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A recent survey of this industry found 280 vessels operating in 1984/85. The number of vessels operating has more than doubled in 5 years. (Hundloe 1985). The types of services included as commercial passenger vessel services are day trips., extended trips which operate on regular schedules or on demand, bareboats, water taxis, ferries and "floating hotels".

The number of visitor days carried was estimated at 1.2 million, and passenger expenditure was at least \$35 million in 1984/85. (Driml in prep.). Two growth areas are bareboats and large catamarans. Bareboats are virtually restricted to the Whitsundays where 151 were operating in 1986 (Whitsunday Marketing Services 1986), and the numbers have increased from 52 in 1981. (McGinnity 1981)

The first large catamaran was introduced in 1982 and now 15 are operating in the Great Barrier Reef Region providing over 400,000 visitor days per annum. These vessels carry up to 300 people and travel at speeds of around 25-30 knots. Six of these vessels travel to platforms on outer reefs, where coral viewing is the main aim of the excursion. The other catamarans operate to resort islands.

The most obvious trend in tourism, as emphasised above, is an increase in all aspects of tourism. Fringing reefs are important in this context because they contribute to the attraction and because they may come under increasing pressure especially, given, the concentration of resorts on continental islands and the boating activity in the whitsundays.

## RECREATION TRENDS

A discernable trend in reef recreation is a trend towards nature appreciation. Interest in seeing the reef itself has been facilitated by the introduction of technology via high speed catamarans, 'semi-subs' and the proposed floating hotel. Attention seems to have shifted to "outer reef" experiences which offer clear water and attractive reefs. However the majority of visitor days are still spent in the vicinity of fringing reefs.

Whilst the number of people who undertake recreational fishing continues to grow, non-extractive recreation is growing at a faster rate. The 1980 survey of charter boats found 75% of vessels cited fishing as a primary activity (Hundloe 198-5) while in 1985, the proportion of boats involved in fishing was 55%. (Driml in prep).

Although the trend toward reef based recreation has to date generally by-passed fringing reefs and focussed on "outer" reefs, it could be speculated that this trend towards nature appreciation could lead in time to a "rediscovery" of fringing reefs. The application of new reef access technology in the form of 'semi-subs' may be a first step in this direction. Other applications of technology and interpretive efforts may include, snorkel trails, reef walking platforms, undersea tunnels, all of which may be associated with island resorts adjacent to fringing reefs.

## CONCLUSION

A significant amount of the tourism in the Great Barrier Reef Region occurs within the vicinity of fringing reefs via island resorts and commercial boating. Just to what extent this tourism is attracted by the fringing reefs per se is not known, and probably never will be precisely. Coral reefs are important amongst the number of factors that combine to make the Great Barrier Reef Region attractive to tourists.

Participation in activities on fringing reefs is much lower than the estimated visitor days spent in the vicinity of fringing reefs, indicating a potential for this resource to be more heavily used. Demands for use will increase if the trend for tourism to increase continues, as is expected. The other potential source of increase in use is a shift in attitudes of visitors to express more interest in learning about and experiencing all aspects of coral reefs. Technological change will facilitate increasing use of fringing reefs by making access easier.

The potential of fringing reefs as a tourist resource will be realised if tourist operators recognise the demands of tourists for information on and access to reefs and act upon these demands utilizing developing technology.

The long term existence of fringing reefs as a tourism resource, of course depends upon appropriate management of tourist levels and impacts. The Great Barrier Reef Marine Park Authority and Queensland National Parks and Wildlife Service have an important role to play in interpretation of fringing reefs and management of recreational use to appropriate levels.

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