

# Ræflections

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FREE ISSUE

### **Landmark** in Reef Conservation

By Barbara Henson

On July 1, 1981, the Zoning Plan for the first part of the Great Barrier Reef Marine Park, the Capricornia Section, will formally take effect.

De Coning Plan, which has been developed out of a long process of research, information-gathering and review of public comment, brings to completion the first area of the Marine Park. The degree to which it is successful will have a very significant bearing on how the next stages of the Park proceed. It will also shape the future directions of the Authority itself.

### \_\_\_\_\_ Landmark in Reef Conservation \_\_\_\_\_

Establishing Capricornia marks a culminating point, not only in the work of the Great Barrier Reef Marine Park Authority over the last five years but of more than a decade of intensive public debate. The issues of environment and limitations of resources which has emerged throughout the world in the sixities were concentrated in Australia on the future of the Great Barrier Reef — its use, management and possible exploitation.

With public opinion further aroused by specific threats like the crown of thorns infestation, the passing of the Marine Park legislation in 1975 with the support of all political parties was indicative of the widespread national support given to the goal of conserving the Reef.

From its establishment in 1976, the Marine Park Authority was faced with a conservation task very different from that required for terrestrial parks.

The concept of "conserving in order to use" was fundamental to the very wording of the 1975 Act — "regulation of the use of the Marine Park so as to protect the Great Barrier Reef while allowing the reasonable use of the Great Barrier Reef Region".

It is the goal of preserving and indeed enhancing existing uses and enjoyment, both recreational and commercial, that has made the Authority's task unique in Australia's park management concepts and development. Recently, the concept has been adopted in Asia and Oceania.

Because of intersecting responsibilities with the Queensland Government in the Region, the Authority has also needed to develop intergovernmental liaison and coordination. A Ministerial Council representing both governments was formed to co-ordinate marine park policy.

The Authority considered two major options in determining the order of priority for consideration of areas for declaration. The first was to select areas in which access is easy, the stresses of usage evident, and some scientific information available.

The second was to select areas which are remote and apparently little used in order to conserve them in a pristine condition.

At a meeting in February 1977, the Authority, with the advice of the

Great Barrier Reef Consultative Committee selected the area encompassing the reefs and shoals of Lady Elliott Island and the Capricorn and Bunker Groups for consideration as the first part of the Great Barrier Reef Marine Park.

This area was selected because of its significance in the fields of commerce, recreation, tourism and science. It is regarded as one of the best known areas of the Great Barrier Reef Region, and has good accessibility from southern capitals.

Prior to actual declaration of the Capricornia Section, the Authority developed an inventory of resources within the proposed Section. This included a description of all forms of usage, including commercial fishing, photography, tourism, sailing, diving, shipping, recreational fishing, scientific research, shell-collecting and aircraft operation. It also examined certain coastal zone activities that affect or have the potential to affect the recommended area.

When the area was proclaimed in 1979, the Authority called for representations from the public concerning the Zoning Plan. The information received added detail to the reef inventory and gave a clearer picture of current usage and likely future demand.

Many submissions expressed concern that the quality of reef experience might deteriorate or that it had already done so. For fishermen the abundance of fish and the opportunity to catch the big ones had declined. For divers, over-use in popular spots had caused an accumulation of minor damage, broken coral and loss of fragile species. For the underwater photographer, the activities of spear fishermen had made the colourful fish shy and difficult to approach.

These were some of the problems which the Authority had to tackle in developing the Zoning Plan.

When the draft Zoning Plan was released on 9 April, 1980, the Authority immediately launched a comprehensive public information and participation program designed to obtain maximum community input.

It included information and display centres throughout Australia, explanatory leaflets and information documents, advertisements in all major newspapers advising of the release of the Zoning Plan and calling for public submissions, and special



displays in all capital cities and the major Queensland coastal centres.

One major change to the Plan resulted from this intensive public review. A new zone, widely requested in received submissions, was included: Marine National Park "B" Zone, providing for unrestricted public access to an area free from the influences of fishing and collecting. It may be likened to a terrestrial national park, in that visitors will be able to appreciate reef areas and marine life which remain relatively undisturbed by human activity.

Though 80% of the total Section remains virtually unrestricted, other zones include general use areas to allow for a wide range of activities including commercial fishing; a marine park zone which allows limited recreational fishing; a scientific research zone where approved research can be carried out protected from the influences of recreational activities, fishing and collecting, and a preservation zone to keep some areas undisturbed by man apart from special research.

Replenishment Areas are an important feature of the Zoning Plan. Traditional management techniques elsewhere in the Pacific and recent research suggest that temporary closure of a small proportion of reefs for a period of 2 to 5 years leads to an overall increase in the catch of fish. Seasonal Closure Areas serve the purpose of protecting the breeding of rare or endangered species of birds or turtles during nesting seasons.

Day-to-day management of the Marine Park is the responsibility of the Queensland Government

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# Capricornia Section Great Barrier Reef Marine Park

On 1 July 1981 the Zoning Plan and Regulations for the Capricornia Section come into operation. The Zoning Plan and Regulations define the activities which can occur in different zones of the Marine Park and the condition of entry into each of the 6 zones. Permits are required before some activities may be undertaken in certain zones.

The following items become effective:

- The Capricornia Section becomes part of the Great Barrier Reef Marine Park
- The Zoning Plan
- Management Operations
- Regulations
- Permits

The Capricornia Section is adjacent to the Queensland coastal centres of Rockhampton, Yeppoon, Gladstone and Bundaberg. The Marine Park covers more than 12,000 square kilometres of the most southern area of the Great Barrier Reef.

Most visitors to the Marine Park will not require a permit for recreational activities. Permits will be required for collecting and some fishing. About 80 per cent of the area is without restrictions.

# ———— The Zoning Plan and Users ———

The Zoning Plan for the Great Barrier Reef Marine Park — Capricornia Section provides for all reasonable uses of the park area to continue. Approximately 80 per cent of the area is without restriction.

It is important that all users are familiar with the Zoning Plan, and copies are available free of charge from the Authority. As a guide only, the following provisions are highlighted for the major user activities.

#### **Commercial Fishing**

Trawling may take place in the General Use "A" Zone and linefishing (including trolling) in General Use "A" and "B" Zones except in a Replenishment Area or Reef Appreciation Area. Trolling for mackerel species is permitted in a Replenishment Area from 1 May to 31 August each year. Commercial spearfishing is not permitted anywhere in the Section.

#### **Recreational Fishing**

This may occur in General Use "A" and "B" Zones under the same provisions as commercial fishing. It is

also permitted in the Marine National Park "A" Zone, except in a Reef Appreciation Area, providing a handheld rod and reel, or a handline is used with an artificial fly; a lure; or no more than two hooks or gang-hooks.

Non-commercial spear-fishing may occur in General Use "A" and "B" Zones except in the Replenishment and Seasonal Closure Areas.

#### Other Recreations

Recreational activities, such as diving, snorkelling and reef walking are permitted throughout the Section except in the Scientific Research Zone and the Preservation Zone and in Seasonal Closure and Replenishment Areas.

#### **Boating**

All vessels may use the General Use "A" Zone, with the exception of large ships. All vessels may use General Use "B" Zone and Marine National Park "A" and "B" Zones, but only if equipment used for fishing or collecting is stowed and secured while vessels are passing through zones where such equipment is not permitted.

# ———The Zoning Areas ———

The Zoning Plan for the Capricornia Section provides six zones, as shown on adjacent map.

#### General Use "A" Zone

Is the largest, providing opportunities for all reasonable uses consistent with the conservation of the Great Barrier Reef.

#### General Use "B" Zone

Allows entry for similar activities except trawling and commercial shipping are not permitted.

In both General Use Zones certain reefs may be closed periodically to enable replenishment of fish and other resources, or to protect birds and turtles during nesting times.

These restricted areas are known as Replenishment Areas and Seasonal Closure Areas. There is also provision for Reef Appreciation Areas which will provide small areas on heavily used reefs where the public may observe and appreciate relatively undisturbed marine life.

# Marine National Park "A" Zone (Heron and Wistari Reefs)

Provides protection of the natural resources of the area and allows nonextractive recreational activities, limited recreational fishing and approved research.

### Marine National Park "B" Zone (Llewellyn Reef)

Allows non-extractive recreational activities and approved research.

# Scientific Research Zone (One Tree Island Reef)

Allows approved scientific research only.

# Preservation Zone (Wreck Island Reef)

Is closed to public entry to preserve an area in its natural state undisturbed by man, except for scientific research which cannot be carried out in any other zone.

Note: Mineral exploration, except for the purpose of scientific research, and commercial spearfishing are prohibited throughout the Capricornia Section.

#### **Aircraft Movements**

All aircraft may continue to overfly the Section at a minimum height of 500 feet except over a Seasonal Closure Area, the Preservation Zone, Scientific Research Zone and the Marine National Park "B" Zone where the minimum height is 1,000 feet.

#### Collecting

The collection of shells and aquarium fish in the Section may only take place in General Use "A" and "B" Zones subject to any conditions imposed on the permit.

# = Management =

The Great Barrier Reef Marine Park Authority, with the assistance of Queensland Government agencies, is responsible for:

- preparing management plans and programs
- implementing the objectives and provisions of the Zoning Plan and Regulations
- setting guidelines and standards for management.

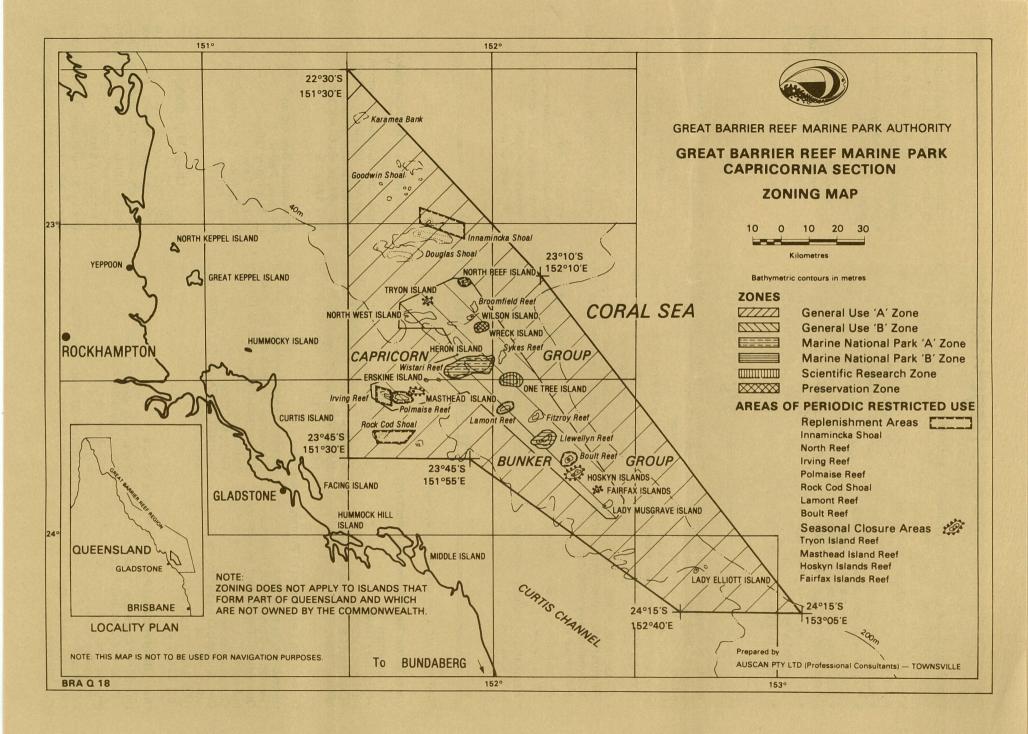
Day-to day management of the Marine Park is the responsibility of Queensland Government agencies within agreed guidelines and programs. Reefs and waters will be managed by Queensland Fisheries Service. Island national parks are the responsibility of the Queensland National Parks and Wildlife Service.

The emphasis in management is on:

- conservation while allowing reasonable use
- maximising public appreciation and enjoyment
- using effective surveillance while avoiding methods which compromise visitor enjoyment.
- using preventative methods for enforcement whenever possible
- monitoring use and impact of visitors, reef condition and management effectiveness
- co-ordination of all management activities within the Section.

Management activities are broadly grouped into:

- education and interpretation
- surveillance
- enforcement
- monitoring
- · resource management.



# Regulations =

The Regulations give effect to the Zoning Plan and provide for operation of procedures and additional information, some of which include:

- permit requirements
- lists of declared species of plants, animals and marine products which may not be collected without a permit in the Capricornia Section.
- how the Authority may declare restricted areas
- · offences and penalties

Activities referred to in the regulations which are offences are:

- use or entry contrary to the provisions of the Zoning Plan
- · use or entry without a permit
- use or entry contrary to permit conditions
- depositing litter
- removal of wrecks without permission or contrary to conditions

- spearfishing using an underwater breathing apparatus or powerhead
- discharge of waste from islands, vessels or aircraft
- false or misleading information in a permit application.

Note: The regulations may be purchased through Australian Government Publishing Service Bookshops, located in capital cities.

### Permits —

Permits are required before some activities may be undertaken in certain zones. Most visitors to the Marine Park will not require a permit for recreational activities, except for collecting and some fishing.

- Please check the Zoning Plan, Regulations and explanatory information and apply for a permit if necessary
- Permits are free and are required as of 1 July 1981
- Regulations include penalties for offences

Generally speaking, you should apply for a permit for the following activities:

- fishing with a net in some zones
- collecting plants, animals and marine products in all zones
- navigation and operation of tourist cruise ships (greater than 500 tonnes)
- removal of vessels that are wrecked, stranded, sunk or abandoned
- construction and conduct of mooring facilities

- research and research station activities
- operation of aircraft below specified levels (500ft or 1000ft depending on zone)
- construction and conduct of aircraft landing areas
- use of hovercraft
- provision of tourist or educational facilities
- establishment of tourist or educational programs
- construction and conduct of an underwater observatory
- discharge of waste

### Further Information =

Further information and permit application forms may be obtained from:

#### **Great Barrier Reef Marine Park Authority**

The Chairman 94 Denham street P.O. Box 1379 TOWNSVILLE. QLD. 4810 (077) 712191

The Chairman
Gas Industry House
Cnr. Moore and Rudd Streets
P.O. Box 791
CANBERRA. A.C.T. 2601
(062) 470211

#### **Queensland Department of Primary Industries**

Director of Marine Parks
Division of Dairying and Fisheries
Queensland Department of Primary
Industries
Comalco House
Cnr. Ann and George Streets
G.P.O. Box 46
BRISBANE. QLD. 4001
(07) 2240414

Director of Marine Parks
Division of Dairying and Fisheries
Queensland Department of Primary
Industries
C/- Post Office
BURNETT HEADS. QLD. 4670
(071) 722988

#### **Queensland National Parks and Wildlife Service**

Director of Queensland National Parks and Wildlife Service MLC Centre 239 George Street P.O. Box 190 BRISBANE. QLD. 4000 (07) 2240414 Regional Superintendent S.G.I.O. Building 212 Quay Street P.O. Box 1362 ROCKHAMPTON. QLD. 4700 (079) 276070

### **Queensland Lands Department**

The Chairman Land Administration Commission Land Administration Building 130-148 George Street BRISBANE. QLD. 4000 (07) 2240515

Queensland Boating and Fisheries Patrol District Patrol Officer Yarroon Street GLADSTONE. QLD. 4680 (079) 721533

### **User Handbook**

The book, *Under Capricornia*, is available upon request. It outlines complete details of the Zoning Plan, Regulations, all activities and management responsibilities in the Capricornia Section.

It can be purchased by contacting The Great Barrier Reef Marine Park Authority at the adjacent addresses.

### Reef Speakers Available

Members of the Great Barrier Reef Consultative Committee are available to speak to public groups and assist the dissemination of information about the Great Barrier Reef and the marine park concept.

The Committee has 15 members representing a diversity of interests connected with the Great Barrier Reef, including fishing, tourism, marine science and conservation.

Members locations are:

Townsville: Professor Kevin Stark

(Chairman)
Dr John Bunt

Cairns: Mr Gordon McKauge,

Mr J.H. Izatt

Mackay: Mr Jim Ballingall

Brisbane: Mr Eddie Hegerl, Dr Des Connell,

Dr Patricia Mather, Dr Peter Saenger, Dr Graham Saunders,

Mr Jack Woods

Canberra: Mr Graeme Kelleher

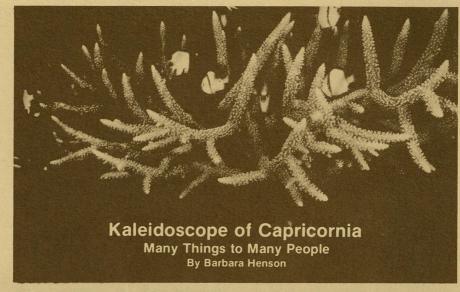
(Chairman of the Authority)

Mr Ken Thompson,

Mr Don Fraser,

Mr Paul Eccles

Initial contact by interested groups may be made through the Great Barrier Reef Consultative Committee, P.O. Box 1379, Townsville, Qld. 4810, or by telephoning Mr David Chippendale (077) 712191.



No other natural environment in the world compares to the Great Barrier Reef in its size, beauty, variety and complexity.

The major reefs of the system extend for more than 2,000 kilometres along two-thirds of the eastern Queensland coastline from Cape York to north of Bundaberg. Built on the massive accumulations of limestone from millions of years of coral growth, their size and shape varies — coral cays with vegetation and bird life, platform and ribbon reefs and fringing reefs adjacent to the mainland and continental islands.

It is both a vast and intricate world.

More than 2,500 individual reefs and 71 coral islands are found in the Region. Fish species number more than 1,500, bird species at least 250 and molluscs a staggering 4,000. Six species of turtles inhabit the waters of the Region, and two have breeding grounds there of world importance.

Though a great proportion of this vast area is relatively untouched by man, recent decades have seen increasing pressure upon the more accessible areas, and concern for its preservation led to the concept of a Marine Park.

The Capricornia Section covers

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### Landmark in Reef Conservation (continued)

agencies within agreed guidelines and programs. Reef and waters will be managed by Queensland Department of Primary Industries — Division of Dairying and Fisheries. Island National Parks are the responsibility of Queensland National Parks and Wildlife Service. Management will emphasise the enhacing of public use and enjoyment through education, information and interpretative activities and visitor facilities. It will also emphasise the need for a continuing liaison with user groups and maximum contact between visitors and park officers.

The Capricornia Section being the first part of the Marine Park to come into operation, the effectiveness of its zoning and management will be a crucial factor in the continuing development of the Marine Park.

Because of this, the Authority and relevant Queensland agencies are arranging a program of data collection and monitoring to assess the condition of the Reef and its resources, levels of usage and the effectiveness of zoning. The Plan itself will be thoroughly reviewed in two or three years, and revisions may be made in light of the experience gained.

Ongoing scientific research will contribute to the refining of techniques for conservation and management of Reef resources, and social and economic changes will continue to influence management and future planning. With increasing usage by commercial and recreational fishermen, levels of fish stock will be monitored carefully so as to plan for replenishment.

An increasing tourist industry will mean a great demand for educational programs and more areas reserved for looking and learning. Meeting this demand while providing for conservation, preservation and for reasonable levels of existing uses will require a sensitive and flexible management program.

The information needs of this program will require active intergration of economic, social and environmental research, in order to match and mould demand to the limitations of the natural resources.

At stake in this immense management project is the maintenance for the future of the world's largest natural wonder. Its importance has been signified by its nomination for inclusion on the World Heritage List, which includes such areas as the Yellowstone National Park and the Grand Canyon in the U.S.A.

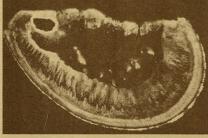
People want the Reef to survive. Many depend for their livelihood on its doing so. The establishing of a Marine Park will conserve the natural assets of the Reef. Under a wideranging and responsible management program, commercial and recreational fishermen, divers, tourists and scientists can have continuing access to this magnificent and unique part of the natural world.

12,000 square kilometres of the most southern Reef and its outstanding biological features were significant in its development as Marine Park. Its fauna is distinctive in that it contains the most southerly populations of many tropical species, and the most northerly populations of many subtropical and warm temperature southern species.

Birds are one of its most attractive features. Permanent cays occurring within the Section represent 30% of the important sea-bird breeding sites of the Barrier Reef Region. More than half of the total fish species found on the Reef have been identified within Capricornia.

Geographers, biologists and ornithologists have a long history of interest in Capricornia. The area was noted in the journals of Cook, Banks and Flinders, and the H.M.S. Beagle and other survey vessels visited it between 1839 and 1845. Further scientific attention came within the founding of a major research station on Heron Island in 1951, and a smaller field station on One Tree Island in 1966.

Its development as part of the Marine Park will help to protect it from even





the unintentional damage often associated with intense use.

Reef walking, diving, snorkelling and the anchoring of boats at low tide all damage coral, and the cumulative effect of such damage in popular areas can cause local alteration over time. The concentration of fishing in certain areas, will affect fish populations and size, and even more modification can result from industrial exploitation such as the guano extraction from Reef islands early in the century.

The zoning of the Marine Park defines the activity or activities permitted in any given area. It separates those which may conflict, provides areas for recreational and scientific use and protects the more fragile parts of the Reef.

The natural diversity of Capricornia allows for a similar diversity of use and enjoyment for the visitor. To the fisherman, it is large, colourful and delicious fish; to the reef-watcher, scientist, photographer, snorkeller or diver, it is abundant, fascinating forms of life in a myriad of shapes and colours; to the boatman, it is clear blue waters, sunshine and exotic anchorages. To others, it is a means of livelihood.

In fact, much reef usage is multipurpose, and 80% of this first part of the Park carries no restriction at all, apart from mining and comercial spearfishing. Large areas surrounding Lady Elliott, Lady Musgrave and North West Islands and Reefs have been zoned for a wide range of general uses, including commercial fishing. Recreational fishing with some gear restrictions is additionally provided for in Marine National Park "A" Zone, around Heron Island.







Reef Appreciation Areas exclude fishing and collecting, in order to provide reef-watchers and photographers the opportunity to meet abundant reef life unafraid of man.

Llewellyn Reef, Marine National Park "B" Zone, is an extensive and very beautiful reef which has been zoned specifically for public appreciation and enjoyment, free from the effects of fishing and collecting.

Certain areas are of special importance in the breeding of rare or endangered species. Seasonal Closure Areas within the general use zones will be closed to public entry during the nesting season of birds or turtles

Wreck Island is the most important nesting ground in the Pacific for the loggerhead turtle. It is of such world scale significance that the waters around the island have been declared a Preservation Zone to which access can only be made by permit.

With an approach that emphasises information and interpretation both of Reef ecology and the potential impacts of over-use, Marine Park management aims to enhance use and enjoyment of the Reef, while at the same time conserving its beauty and resources for other people and generations.