REEFLECTIONS

Great Barrier Reef Marine Park Authority

PUTTING THE REEF INTO WORDS

It's likely that most of us who have had an encounter with the Great Barrier Reef have been frustrated by our inability to put the experience into words. Not so for Mark O'Connor. For the past decade he has been writing about the Reef in a way that is both scientifically accurate and personally meaningful.

Mark O'Connor is one of the country's best-known, contemporary poets. Since his arrival on the Australian literary scene in 1973, he has been the recipient of numerous awards including the Poetry Biennial International Prize (1973 and 1975), the Marten Bequest Fellowship for Poetry (1977) and the John Shaw Neilson Poetry Prize (1981). He is also the author of three books, *REEF POEMS* (1976), *THE EATING TREE* (1980) and *THE FIESTA OF MEN*, due out in February 1983.

In the article that follows, Mark discusses the problems he has encountered when writing about the Reef. We are sure you will find the article both enlightening and entertaining and hope that for some of our readers it offers help in overcoming the frustration we all feel when ...

Putting the Reef Into Words

by Mark O'Connor

When I arrived on One Tree Island in September 1973, I was the first white Australian poet to concentrate on writing about the Barrier Reef.

I soon found out why. The English language — that strange north-west European language we speak in Australia — was attuned to the Northern Hemisphere. It had few words and fewer concepts to apply to the exotic world of an Australian coral reef.

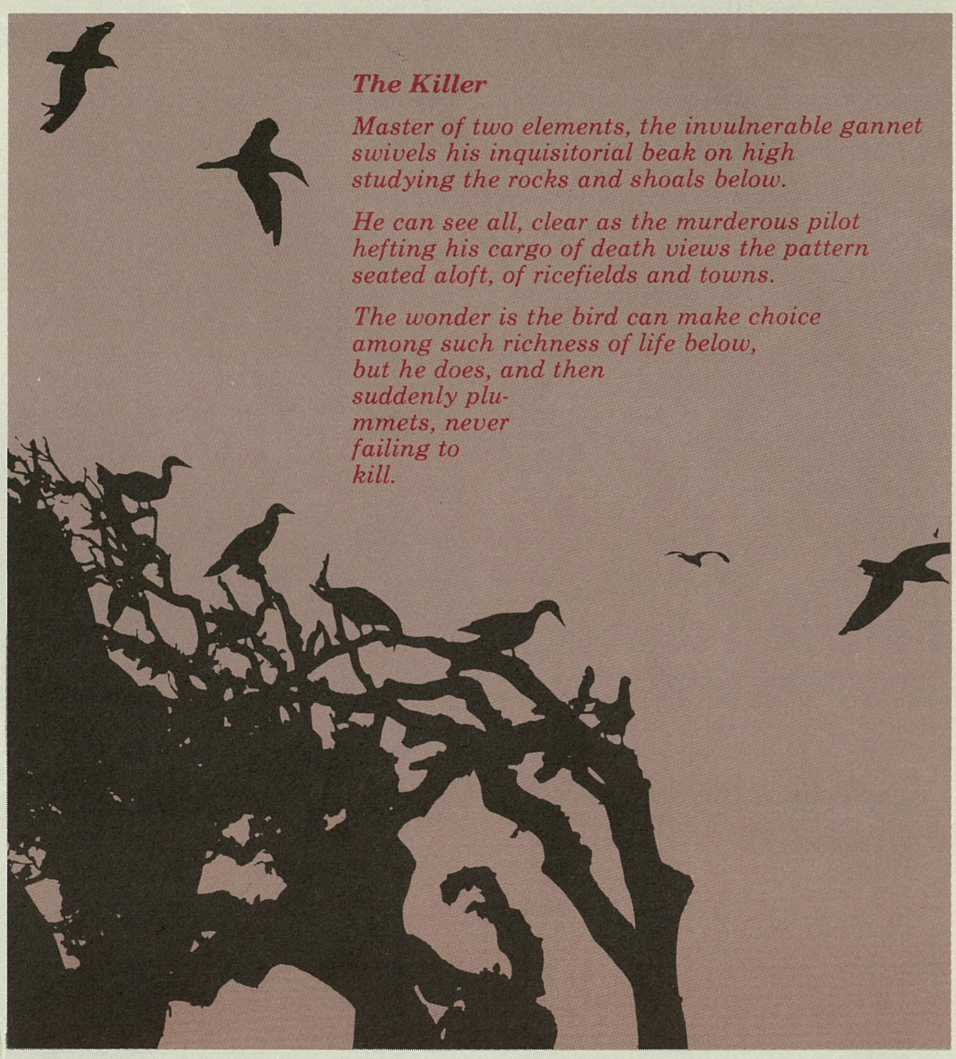
Most books about the Reef consisted of lavish colour photos with just a pale ribbon of text at the foot, stating Latin names or geographic distributions.

I remember one photo in particular, of a glorious butterfly cod with all its multi-coloured 'wings' and spines outstretched, against a background of yellow-and-lavender compound ascidians. The text merely gave the fish's name and warned against touching its spines. Nothing about where such an Alice-in-Wonderland creature came from, or what it was doing in that bright fairyland.

Unlike the English language, the photographer's art had no traditional limitations. It could portray the tropics as readily as the temperate zone, capture the shameless blue and crimson of a harlequin tusk fish just as well as the fine speckles of grey on a thrush or trout — better in fact. English is a fine instrument for celebrating snowdrops or daffodils or skylarks and other creatures that have gained a traditional literary meaning over the centuries — but it is tonguetied when faced with some polyp or reef fish that is a dozen times more beautiful and intricate, but has only a jaw-rattling Latin name.

Perhaps I should have left it to the photographers to capture the poetry of the Reef? But pictures need explanations. Otherwise you merely say WOW without knowing what the picture has said to you. And you will have no defense when the economist comes along with his carefully costed plan for concreting the Reef and turning it into an oil well, because he will have words for all his arguments, and the only argument not mentioned will be the one you felt but couldn't find words for when you looked at the picture and said WOW. In any case there are many people (like myself) who need to verbalise what they see, and don't feel they have experienced something until they can trap it in words.

To such people the over-objective jargon of scientific research ('Preliminary studies on juvenile mortality in *Labroides dimidiatus* and related species' etc.) brings no satisfaction. We want something with a human significance, words that



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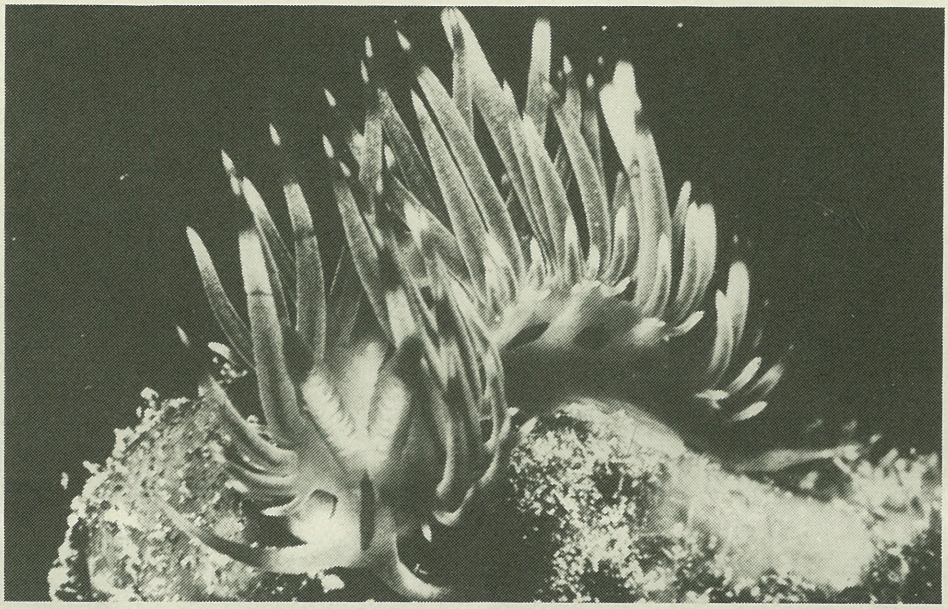
PUTTING THE REEF



speak to the heart as well as the head: in fact, poetry.

I owe a great debt to the scientists at the One Tree Island and Heron Island research stations. They fostered my belief in the possibility of biologically accurate poetry, and showed me where and how to observe nature on the luxuriant reef flats and coral cays.

At the same time scientists, even those who knew nothing about literature, took to my poems with great enthusiasm. I soon realised why. I was writing about things they knew about, things that mattered to them and in which they felt a poetic quality they themselves couldn't put into words. Scientists who could never have been persuaded to read 'museum literature' like Tennyson and Wordsworth, were avid for this sort of 'real literature', and proved to be astute and helpful critics of it. They couldn't understand why other poets didn't write of such things.

I learned that people who said there was no market in Australia for poetry were wrong. There may be no great market for old-fashioned European poetry, but there is a huge interest in the sort of poetry that deals with real things, and keeps faith with its readers.

I began with short-line poems like 'The Herons' which simply described the way things were.

But since most human beings, unfortunately, are far more interested in their own species than in any other, I also tried sometimes to make the reefcreatures stand for human qualities. For instance, in 'The Killer' I described the gannets with their effortless circling flight — and murderous intent.

I was particularly fascinated by the mating flights of the terns. *Despite* nonsense like *Jonathon Livingstone Seagull*, seagulls are not particularly good fliers; but their sharp-winged relatives the terns are. And in the mating season the terns pull out all stops, whirling around the sky in flocks of thousands. Their displays are not merely acrobatic. Terns form monogamous pairs, but since they have no language, the only way they can 'talk' to each other when courting is by flying side-by-side, imitating or not-imitating each others' movements. You know that two terns are a couple when their movements on the wing are so synchronised that it's impossible to tell which is imitating which.

This time I made the human comparisons explicit:

The Pairing of Terns

Human lovers know it only in dreams
the wild mating flight of the terns;
riding the weird and unguessable surf of the air
though flung round the compass they hold as one pair.
Firm as if interlocked by invisible steel
rigid and taut as their back-swept wings
like the sharp stretched skin of a pterodactyl.
Now criss-crossing moon-high in an evening sky
now outskimming the wind on the waves of a twilit bay
now rising, now falling tumultuous heights
and crackling their random delirious laughter.

Their love is everything for which we have only metaphors,
peaks and abysses, stalling and dizzying speeds
wild oceans of distance, and feathertip closenesses,
and wingbeats that answer so swiftly none knows
which struck first, which called and which answered.

But before long I came up against the problem of *names*. So many Australian creatures, and especially Barrier Reef species, have no name or at least no common name. This is part of the price we pay for using a European language, one that is adapted to the common sights and species of a north-west European island. Back in Britian even the most commonplace creatures have names, and often very evocative ones. Clearly it's much easier to write about things with names like 'starwort' or 'Shepherd's purse' rather the *'Crassula helminthii'* or *'Eudromicia macrura'*.

Yet I was forced to use Latin names, and some of them turned out rather well. A poem about the crown of thorns starfish (*Acanthaster planci*) began:

Strange *Acanthaster planci*
or Planc's inconstant spiny star

Where the second line is an exact translation (plus pun) of the scientific name.

Part of the problem for any Australian poet is of course the geographical chauvinism built into the English language. Relatively dull British species are 'boomed' and given all sorts of grandiose traditional associations, while spectacular Australian species are, if not actually unnamed, at least ignored. It was a great shock to me, when I finally went to Britian, to hear the song of the much-famed English skylark — it was a feeble twitter that would hardly be noticed in the Australian bush. By contrast, the Australian magpie, a truly superlative songbird, is hardly mentioned in literature. (It took a New Zealand poet, Dennis Glover, to at least find the words that represent its song: 'Quordle ardle oodle ardle wardle.')

I realized that somehow English-language lyricism had got to be weaned off jonquils and jackdaws, and persuaded to deal with bower-birds and sea-anemones, stone-fish and staghorn corals, magpie-song and mango flowers.

The problem was to give these creatures some kind of *meaning* comparable to the traditional literary associations of the nightingale and the daffodil.

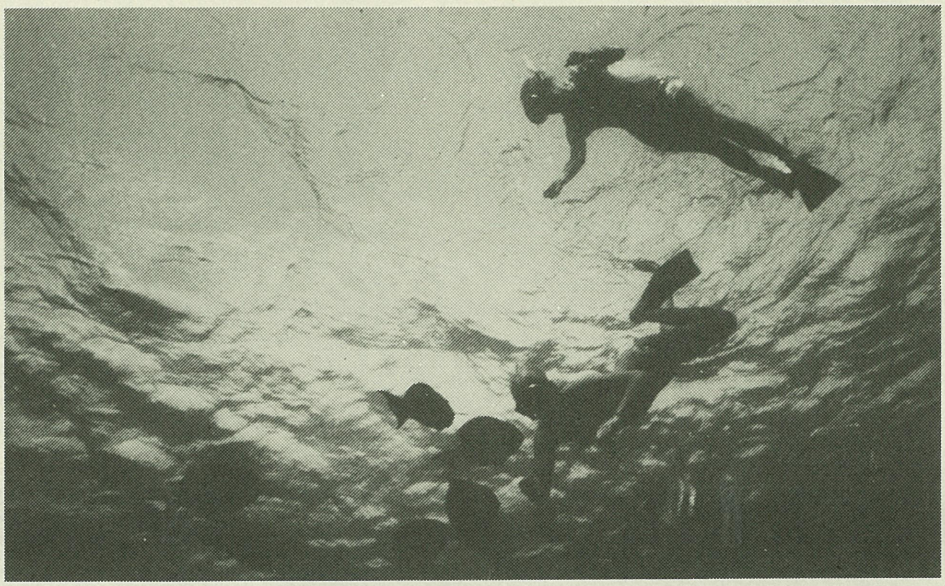
One solution was to turn traditional stories upside-down. In one poem I retold the Garden of Eden story, removing the Northern hemisphere chauvinism that makes us think of paradise as a Middle-Eastern garden. Surely a coral cay would be a better choice:

INTO WORDS

The Beginning

God himself having that day planted a garden
walked through it at evening and knew
that Eden was not nearly complex enough.
And he said: "Let species swarm like solutes in a colloid.
Let there be ten thousand species of plankton
and to eat them one thousand zooplankton.
Let there be ten phyla of siphoning animals, and
one thousand finned vertebrate types, from
white-tipped reef shark to long-beaked coralfish,
and to each his proper niche,
and — no Raphael, I'm not quite finished yet —
you can add seals and sea-turtles and cone-shell and penguins
(if they care) and all the good seabirds your team can devise
oh yes, and I nearly forgot it, I want a special place
for the crabs! And now for parasites to hold
the whole system in check, let ..."

So for five and a half days God labored
and on the seventh he donned mask and snorkel
and a pair of bright yellow flippers.
And, later, the host all peered wistfully down
through the high safety fence around Heaven
and saw God with his favorites finning slowly over the coral
in the eternal shape of a grey nurse shark,
and they saw that it was very good indeed.



But at other times I preferred to use what I call the Modern Myth — the whole complex evolutionary and ecologicial understanding of the world that we have reached in this century. In 'Turtle Hatching' I described the relentless predation of gulls and crabs upon newly-hatched turtles as they try to reach the water:

tweaks the heart, though, to see them seek fate in a crab-hole.
I pulled one out once, wedged and still struggling
down, dropped it with a jerk — a great horny claw

like a parrot's beak had crushed the midsection, sheared
off the head, and behind moved the armoured tarantula
legs of a hairy scuttler with lobe stalked eyes.

In pity I gathered a living brother, hiked it over the rock-flats,
(still scrabbling on in my hand) while its brethren, obedient,
filed along moonless crevices, sating ambuscades of queued-up crabs,

I described how the turtle I rescued was eaten by an adult as soon as I released it into the water, making a mock of my naive ecological meddling.

In an article in the literary magazine (*Meanjin*, 2, 1981, pp.225ff., Evolutionary Myth in the New Nature Poetry) I described the advantages of this new understanding of ecology for Australian poets, pointing out that for lack of it earlier Australian poets had great difficulty making sense of their environment:

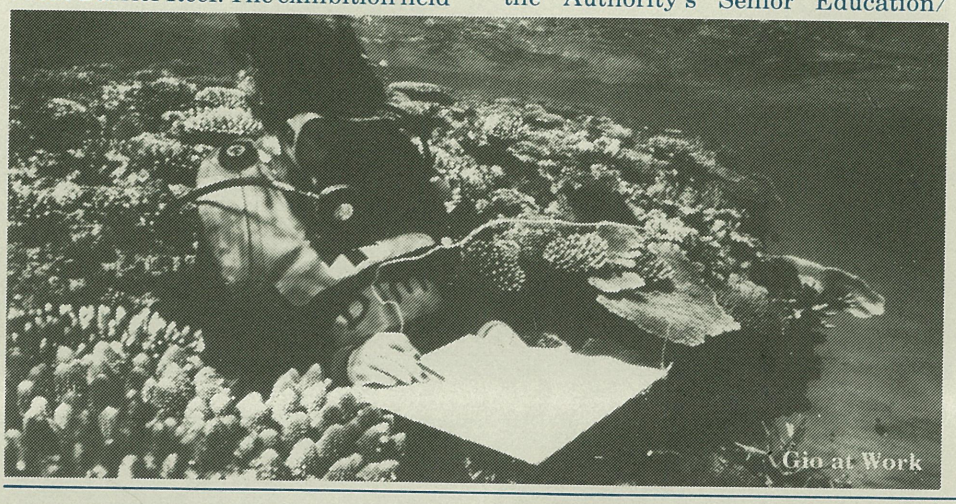
> Most of the flora and fauna didn't seem to mean anything. It is here that the new understanding is so important, because it shows a way to make sense of environments with which the English language has no traditional relationship ...
>
> If Europe is the planet disguised as a human possession, Australia is the thing itself. Which is one reason why Australian poets should be aware of following European fashions. The fact is that we have a different continent to describe; we have hardly begun explaining it to each other, much less to others ... Co-evolution of landscape and language is a subtle process.

All the preceding poems, except 'Turtle Hatching' appeared in my first collection *Reef Poems* (University of Queensland Press, 1976). They won a number of prizes, and I was flattered to find my book on the English Literature syllabuses not only of schools but of a

GBRMPA'S FIRST ART EXHIBITION

Visions of the Reef a selection of twelve underwater reef scenes by Townsville artist Giovanna Cattoi, was the first of what may be a series of exhibitions showing artistic interpretations of the Great Barrier Reef. The exhibition held in the Authority's display gallery ran from 10th to 24th of September, 1982.

Over sixty guests attended the opening night of the exhibition during which the Authority's Senior Education/ Information Officer, Graham Morris praised Gio for her ability to convey the Reef's magnificent beauty through her paintings. It's fair to say that guests were equally impressed with Gio's talents as several of her paintings were sold at the opening.



Gio at Work

A second exhibition proposed for April 1983, will present a selection of batik paintings with a marine motif by Balinese artist, Jimmy Bramantya.

It could be that you know a 'Reef artist' or are one yourself. If that's so, we'd like to know. Whether your medium is painting, photography, weaving or sculpture, your artistic interpretations could prove a valuable way to develop an appreciation of the Reef in those who may know little about it. Interested artists should contact Graham Morris at the Authority for details of future exhibitions.

Putting the Reef Into Words

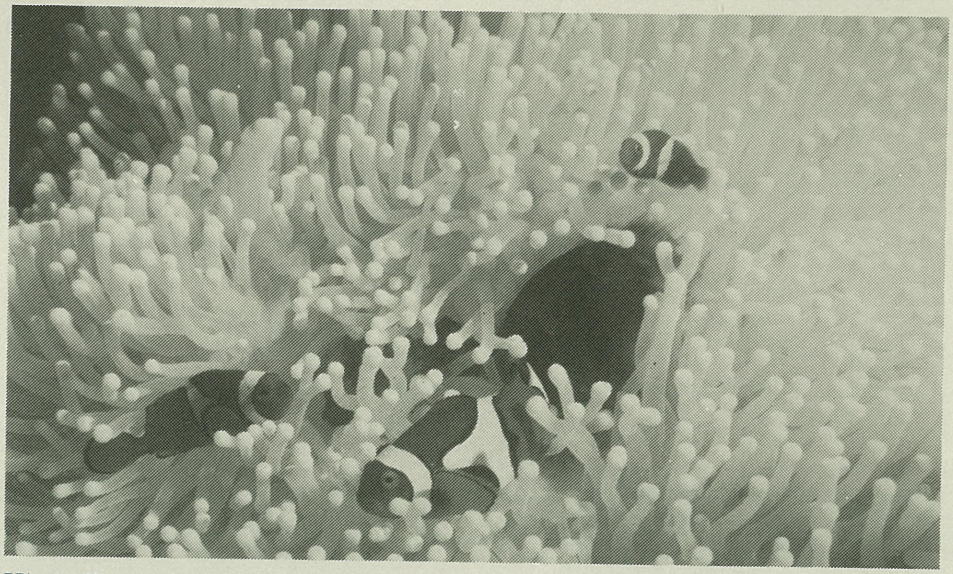
couple of universities within five years of publication. My only regret, paradoxically, was that the poems were not accompanied by colour photos, apart from a magnificent monster of a fish on the cover. However, even there the English language had its revenge. When the photographer looked up his records to find this beauty's English name it turned out to be 'a greasy cod'.

But in my second book of poetry *The Eating Tree*, (Angus and Robertson, 1981), which won the 1979 Shell Prize, I found new ways to talk about the Barrier Reef. In one poem I imagined a coral island gradually evolving through the millennia. The first stanzas were written in a 'primitive' Hopkinish style, but they became elaborate and self-conscious as the Island evolved:

before me was dark mine, was my dark mine,
was unplace, was no-time.
my dreams then no number, my purpose no knowing.
on me dreaming things drowning found doorstep to life,
clung gasping on stone, then tide tossed me their bones.

Shearwaters delved me and tunnelled,
broke my coral to sand
between one Ice Age and another.
Shrubs found me, scaevolas, and sudden
as haze over tide-stream, came pandanus, came salt-bean.

In another long sequence 'The Rainbow Serpent' I used Aboriginal mythology to explain the ecological patterns of Hinchinbrook Island. Of the monsoonal Rainbow Serpent I wrote:



His trails are the endless oncomings of mist
low into the water-choked valleys. His mirror
the mountain slopes shiny with rain. His cave
of retreat is dry season's maker; his
accompanist, the wilful drub of rain that greets
the giant toad's rasping heat-cry.

While in other poems I simply celebrated the peace and beauty of the coral cays:

where the late tern battles home, beating
the tops of ocean's gray pasture to snatch
sprats for its mate, and the stingray slides in,
bluespotted, shy, on the heightening tide,
swift as sea-bird's shadow on cooling sands —
here where sough of casuarinas underscores
the broad Pacific banter, the mile-long rasp
and gasp of waves re-raking coral sands,

The fact is that with a subject as vast and varied as the Great Barrier Reef no single style of writing will suffice. Let me close with part of a poem written last month about a reef near the leper station on Fantome Island:

No harbour, I snorkel
ashore over coral
beyond Ariel's dreams, over
blue-gold and pastel-crimson antlers,
— a world of stone flowers bright
as the Bay of Dunk before they silted it.

Into the stonefish realm, skimming
the brown broken coral bones
whose slightest touch infects
with a life-laden mucous not yet understood ...

Database Makes Debut

Locating information about the Great Barrier Reef will be made easier now that the Authority's bibliographic database, REEF, is available for selective searching.

Still in the early stages of development, it is intended that REEF will cover published material in all physical forms, at all interest levels and in all subjects relating to the Great Barrier Reef. The system uses CSIRONET as host.

In explaining the benefits of the database, the Authority's librarian Jean Dartnall offered these comments:

'REEF provides a single source of references to information on the Great Barrier Reef. Some material like maps, films and posters aren't indexed anywhere. Other material can only be found by consulting a variety of other indexes.'

Indexing of REEF started in July 1982 and twenty to thirty new items are being added each month. Prior to that time, some 2,000 items were prepared as a sample database. Within the next three years the database will contain roughly 15,000 items.

For anyone interested in keeping abreast of additions to the database, the REEF CURRENT AWARENESS BULLETIN is being produced. Available on a monthly basis, free-ofcharge, each issue will provide a listing of all new entries. If you would like to receive the REEF CURRENT AWARENESS BULLETIN, please contact Jean Dartnall to have your name added to the mailing list.

The Great Barrier Reef Entered in The Register of The National Estate

On 28 September 1982 The Great Barrier Reef achieved further international recognition when the Australian Heritage Commission gave notice of its entry in the Register of the National Estate. The Register lists places of Australia's natural environment that have a significant aesthetic, historic, scientific and social value to present day and future generations.

Capricornia Section Seasonal Closure Areas Fairfax Islands Reef

The reef surrounding Fairfax Islands has been closed to visitors since 1 October 1982 in order to protect important seabird and turtle nesting sites from the effects of human intrusion during the breeding season.

As from Wednesday 2 March 1983 this reef is no longer closed to visitors. Although visitors are once again allowed to land on these island national parks, camping on Fairfax Islands is not permitted by the National Parks and Wildlife Service.

The *Great Barrier Reef Expedition 1928-29* was an early example of international co-operation in research, and of co-operation between scientists in various disciplines. The reports of the expedition, produced by the British Museum (Natural History), have been out of print for many years, but GBRMPA has recently been lucky enough to purchase a set for its library. The information and beautiful illustrations are certain to provide a useful perspective to modern research of the Reef. The photograph above, taken in 1928, shows the expedition launch, the *M.L. Luana*.

The Great Barrier Reef Marine Park, The IUCN and The World Conservation Strategy

The Authority is a member of the International Union for the Conservation of Nature and Natural Resources (IUCN). The goal of the IUCN is to promote scientifically-based action directed towards the sustainable use and conservation of natural resources.

The objectives of the Union are:

(a) To ensure that development is sustainable so that the potential of renewable natural resources is maintained for the present and future benefit of people.

(b) To ensure that areas of land or sea which do not have special protection (the vast majority) are managed so that natural resources are conserved and the many species and varieties of plants and animals can persist in adequate numbers.

(c) To protect areas of the land, and of fresh and sea waters, which contain representative or exceptional communities of plants and animals.

(d) To devise special measures to ensure that species of fauna and flora do not become endangered or extinct.

The goals and objectives of the Authority are very similar to those of the IUCN and the Great Barrier Reef Marine Park is recognised by the IUCN as one of the world's best examples of a project which seeks to meet those goals and objectives.

One of the major contributions to sustainable development of the world's resources was made by the IUCN in the production and distribution, in association with other bodies, of the World Conservation Strategy. This Strategy was formally adopted by the Government of Australia last year and that Government, all State Governments and many agencies and individuals are co-operating this year in the development of a National Conservation Strategy for Australia.

The aim of the World Conservation Strategy is to help advance the achievement of sustainable development through the conservation of living resources.

The Strategy:

(1) explains the contribution of living resource conservation to human survival and to sustainable development;

(2) identifies the priority conservation issues and the main requirements for dealing with them; and

(3) proposes effective ways for achieving the Strategy's aim.

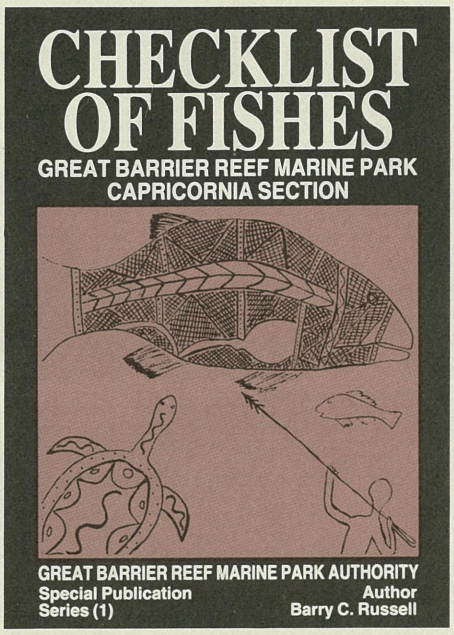
Research Review

It is probably fair to say that most people imagine colourful, exotic fishes when they think of the Great Barrier Reef. In fact, the Reef is the habitat for nearly 1,500 fish species, making it one of the world's outstanding areas of fish diversity. In view of this, the Authority has funded two research projects pertaining to fish within the Great Barrier Reef Region.

One, *An Annotated Checklist of Fishes of the Capricorn/Bunker Group, Great Barrier Reef, Australia,* is the first book to be published by the Authority. The second, *The Economic Characteristics of Fishing in the Great Barrier Reef Region* provides economic data on both recreational and commercial fishing within the Region. 'Research Review' offers the following brief accounts of the studies to our readers.

The reefs and islands of the Capricornia Section of the Marine Park have for many years been the focus of coral reef studies in Australia. Past studies have included the collection and identification of fish species — the first documented record of fishes of the area produced in 1893. The Australian Museum, using the One Tree Island Research Station as its base, also carried out extensive collection of fish fauna of the Capricorn/Bunker Groups between 1966 and 1976.

Now the Authority will publish a book entitled, *An Annotated Checklist of the Coral Reef Fishes of the Capricorn/Bunker Group, Great Barrier Reef, Australia.*



Due to be released in early 1983, the checklist, compiled by Dr Barry Russell, formerly of the Australian Museum and now Curator of Fishes at the Northern Territory Museum, represents a collation of previously published records and recent collecting work. It will contain 864 species, including 282 species previously unreported for the Capricorn/Bunker Group of which 82 species are new records for Australia. The list will be annotated with notes on each species biology and behaviour.

The checklist should prove useful to divers, snorkellers, glass bottom boat enthusiasts, commercial and recreational fishermen, as well as scientists. It will undoubtedly be a welcome addition to any library.

In the future, the Authority may consider publishing a checklist of fishes for each section of the Marine Park.

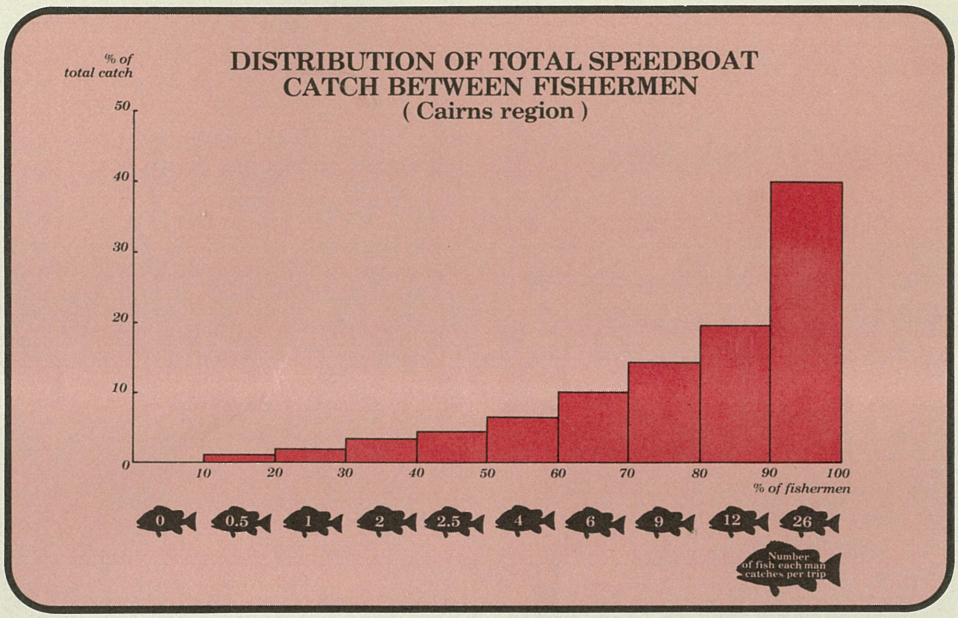


FIGURE 1 shows the percentage of the recreational catch caught by the best 10%, second best 10%, third best 10%, fourth best 10% down to the least successful 10% of recreational fishermen in the Cairns area of the Great Barrier Reef Region.

It is evident that the best 10% of fishermen take 30-40% of the catch, whereas the least successful 50% of fishermen take only about 20%. This means that most people catch hardly any fish whereas a few people take the majority of the catch.

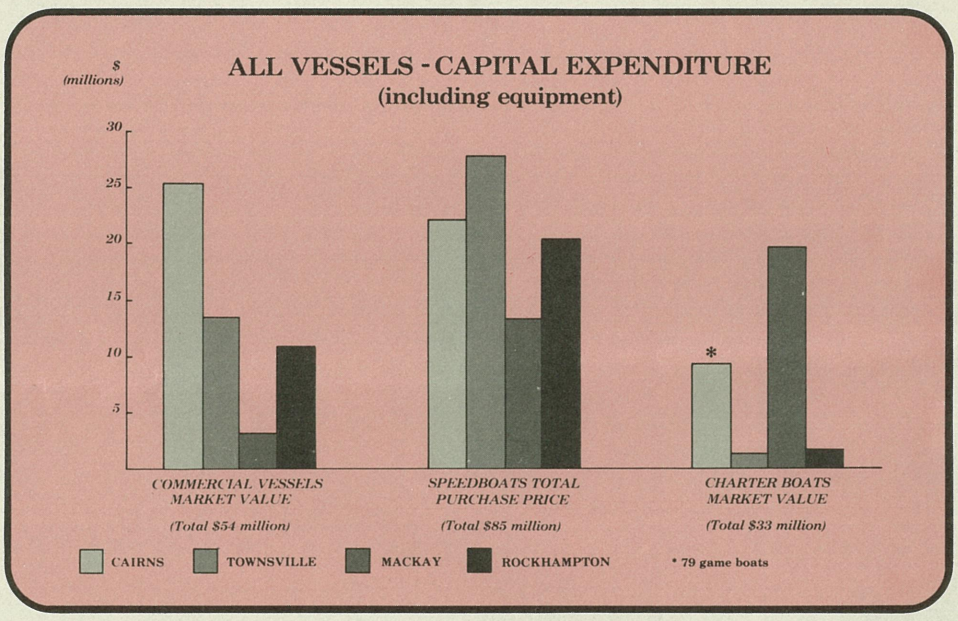


FIGURE 2 shows investment in boats by recreational fishermen, commercial fishermen and charter boat operators. Although the value of commercial vessels and charter boats is given as market value and speed boat value is shown as purchase price, there is obviously an enormous capital investment in both the recreational and commercial fisheries in the Great Barrier Reef Region totalling well in excess of $100,000,000 market value.

New Appointments for Consultative Committee

On 6th October 1982 Mr Tom McVeigh, the Minister for Home Affairs and Environment, announced new members for the Great Barrier Reef Consultative Committee.

Members of the Consultative Committee are appointed for a three-year period by the Commonwealth and Queensland Governments, and represent a variety of fields ranging from tourism and science to conservation and industry.

The appointments of all but two members, Dr J. Bunt, Director of the Australian Institute of Marine Science, and Mr. G. Kelleher, Chairman of the Great Barrier Reef Marine Park Authority, had expired on 3rd October.

Seven retiring members of the Committee have been reappointed. They are:

Mr P. Eccles, Commonwealth Department of Transport and Construction
Mr E. Hegerl, Australian Littoral Society and Queensland Conservation Council
Dr P. Mather, Great Barrier Reef Committee
Mr G. McKauge, Far North Queensland Promotions Bureau Tourism Task Force
Dr P. Saenger, Australian Underwater Federation and Queensland Amateur Fishing Council
Dr G. Saunders, Queensland National Parks and Wildlife Service
Prof. K. Stark, James Cook University of North Queensland

The new members appointed to the Committee are:

Dr R. Bain, Fisheries Division of the Commonwealth Department of Primary Industry
Mr D. Bryan, Queensland Commercial Fishermen's State Council
Mr E. Grant, Queensland Department of Harbours and Marine
Mr T. Hundloe, Australian Conservation Foundation
Mr P. King, Queensland Tourist and Travel Corporation
Mr K. Nielson, Tertiary Industry Division of the Commonwealth Department of Industry and Commerce.

The functions of the Consultative Committee as defined by the Great Barrier Reef Marine Park Act 1975 are:

'(a) to furnish advice to the Minister, either of its own motion or upon request made to it by the Minister, in respect of matters relating to the operation of this Act; and

(b) to furnish advice to the Authority in respect of matters relating to the Marine Park, including advice as to the areas that should be parts of the Marine Park, referred to it by the Authority.'

Research Review cont.

As the checklist will show, the majority of fish in the Capricornia Section are not sought after for their eating qualities.

Most fish are not particularly sought after either by divers, spearfishermen, commercial fishermen or recreational fishermen.

However, the relatively few species that are caught for human consumption make up a considerable volume throughout the Great Barrier Reef Region. Including prawns, the total annual catch of major Great Barrier Reef Region commercial and recreational fisheries is believed to be in the order of 16,000 tonnes.

With assistance from the Queensland Fisheries Service and the Commonwealth Department of Primary Industry, the Institute of Applied Social Research working under contract to GBRMPA put together figures on catches, values, capital and recurrent investment in major commercial and recreational fisheries in the Great Barrier Reef Region. The Region has arbitrarily been divided into 4 areas: Cairns, Townsville, Mackay and Rockhampton. These areas are used as the basis for the information collected, some of which is shown below. A complete study covering the economic characteristics of fishing in the Great Barrier Reef Region should be available in the near future.

The accompanying graphs indicate the type of information to result from the study.

"Cairns without the Great Barrier Reef is the same as Arizona without the Grand Canyon or Egypt without the pyramids."

This is how Gloria Wong of Cairns State High School opened her winning entry in the Great Barrier Reef essay competition, conducted by the Far North Queensland Promotions Bureau. As winner of the competition, Gloria spent a week at the Lizard Island Research Station, studying the ecology of the reef with scientists from all over the world. Pictured above with Gloria are Mr Bernie MacKenzie, Principal of Cairns State High School (left) and Dr Barry Goldman, Director of the Lizard Island Research Station.

For Further Information:
Great Barrier Reef Marine Park Authority
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Townsville 4810
(077) 71 2191

Marine Park Officers and Technicians Appointed

Management of the Great Barrier Reef Marine Park means management of people who use the Park. The underlying philosophy embodied in the GREAT BARRIER REEF MARINE PARK ACT 1975 is to allow reasonable use of the Reef's resources, providing such uses are consistent with the long term conservation of the Reef. Management of the Great Barrier Reef Marine Park is providing a challenge which requires new approaches to those used for management of land-based parks.

The day-to-day management of the Capricornia Section of the Marine Park is being undertaken by officers of the Queensland National Parks and Wildlife Service within guidelines and in accordance with policies and principles set by the Authority in consultation with Queensland agencies. Queensland National Parks and Wildlife Service also has responsibility for management of Queensland national parks and marine parks in the Region.

In early November, the first Marine Park Officers and Marine Park Technicians to be stationed in the Capricornia Section began their duties.

Five Marine Park Officers and six Marine Park Technicians have been employed by the Queensland National Parks and Wildlife Service under the joint Commonwealth/State funding arrangement.

The duties of the Officers will include:

- *collection and collation of information relating to monitoring and surveillance;*
- *conducting interpretive programs;*
- *enforcement of Marine Park regulations;*
- *operation and maintenance of equipment and facilities; and*
- *preparation of reports relevant to management of the Marine Park.*

The Technicians will assist the Officers in carrying out their duties.

Our congratulations go to the appointees. They are:

MARINE PARK OFFICERS

Terris Walker
Zena Dinesen
Steven Domm
Peter Shanahan
Milani Chaloupka
Sue Osborne

MARINE PARK TECHNICIANS

Mark Simmons
Michael Osmond
Gordon La Praik
John Messersmith
Dean Lee

Surveillance: An Important Management Tool

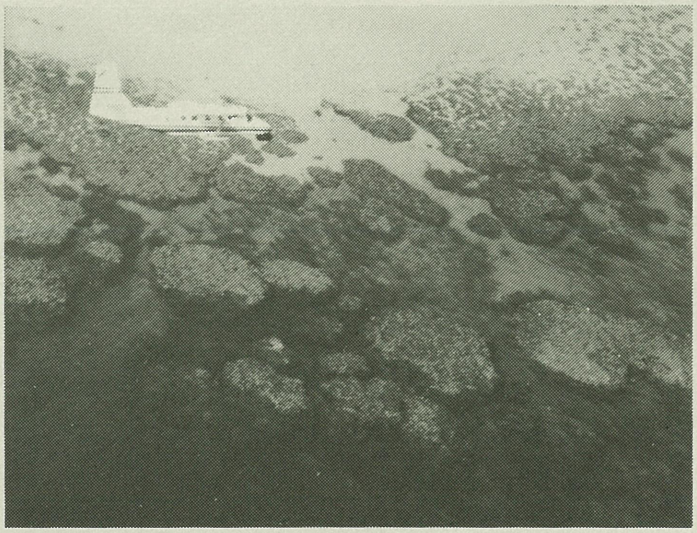
Management of any park is always more than just the implementation of laws or zoning plans. In fact, to set up a management regime that relied only on enforcement activities would not only be prohibitively expensive but would not be practicable because of the immensity of the Great Barrier Reef Marine Park. Day-to-day management of the Marine Park depends on the use of other methods to implement, in a publicly acceptable and non-threatening way, the intent behind the Zoning Plan and regulations and the detail contained within them.

Surveillance, particularly by air, is proving to be a most effective tool in management of the Capricornia Section. Aerial surveillance is a combination of routine surveillance by the civil coastal surveillance network supplemented by charter of light aircraft or helicopters for specific purposes. Surveillance provides data on usage patterns, particularly the location of vessels, any apparent infringements, and sometimes major natural occurrences such as the formation of a cay or aggregations of birds. It is believed that the presence of the aircraft also acts as a deterrent.

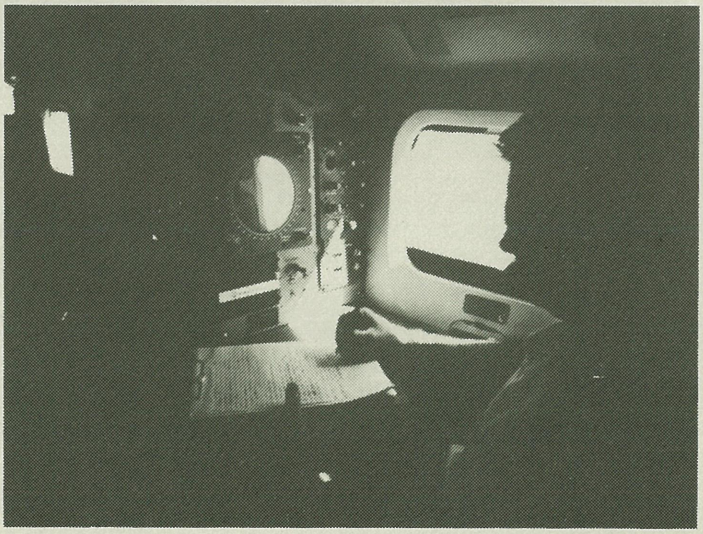
One recent development has been direct radio contact between Australian Coastal Surveillance Organisation (ACSO) aircraft and skippers of charter boats or fishing trawlers. This contact should help to remove the 'big brother' image sometimes associated with surveillance aircraft as well as reinforcing the management presence. It should also help to develop the team approach to using and protecting the Great Barrier Reef and will doubtless be of great importance in emergencies.

Aerial surveillance is complemented by boat patrols to islands and reefs which have been identified by aerial surveillance as requiring visits by management staff. Aerial surveillance can also help park management staff to concentrate on those reefs and islands where staff are needed most e.g. for interpretive work and general oversight of public activities.

As more remote sections of the Marine Park are declared, aerial surveillance will become an even more important management tool. Other high technology techniques such as fixed radar scanners or modern dirigibles will also be evaluated.



Surveillance aircraft over Wheeler Reef off Townsville.



Radar is used in locating vessels during surveillance flights.