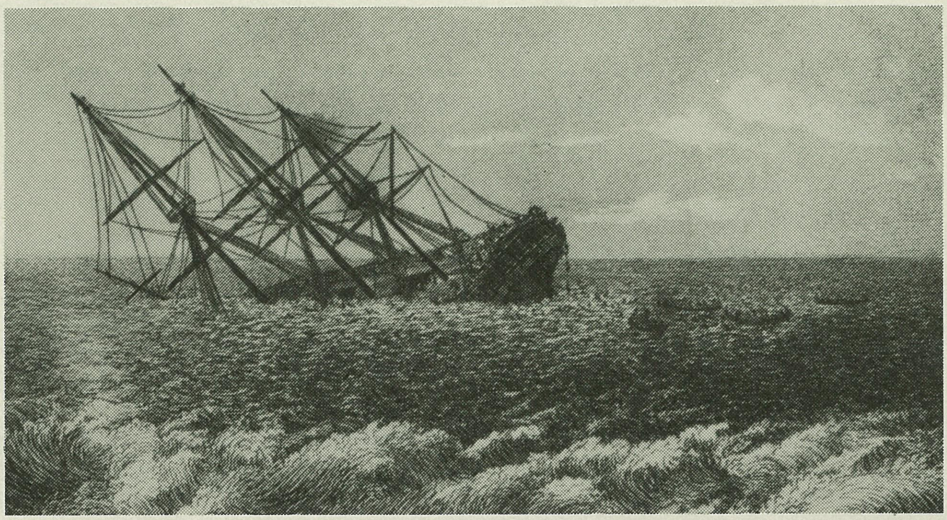
REEFLECTIONS
Great Barrier Reef Marine Park Authority

Historic Shipwrecks Act 1976

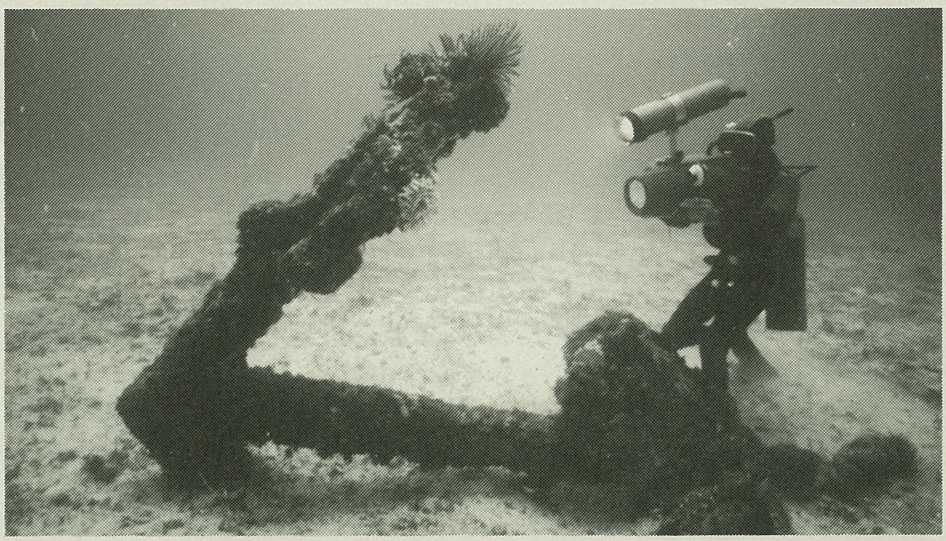
" ... The whole basis of this Act is to protect shipwrecks, not to acquire them for the Commonwealth Government. Should an important wreck be located, the Commonwealth would prefer to see it available for study by all specialist scholars and the relics subsequently displayed for the education and enjoyment of as many Australians as possible rather than have the wreck subject to looting.

... The Commonwealth is fully aware that it is an important fact of life that shipwrecks cannot be protected solely by legislation. A law to protect historic buildings is one thing. You cannot drive up to an historic building, smash it open and remove material from it without a real risk of being discovered. You can, however, go out to a wreck, dive on it and remove material from it with a good chance of getting away with it for a considerable period of time. The legislation is in one sense a moral code the observance of which will mean the protection of a very important part of our heritage. In a legal sense, it is much more. It is intended as a deterrent to those who place their own interests before those of our nation.

... The Commonwealth Parliament passed an Act which is not as some would portray it, inhibitive of the activities of amateur divers. Although vandalism, indiscriminate looting and impetuous souveniring are offences under State laws on dry land, similar actions are expected by some to be condoned because they occur out of sight under water and despite the irreparable damage they do to the heritage and history of all Australians. Indeed, the Commonwealth is so concerned about not impinging on the rights of divers that it amended its Act in 1980 to further ensure that it does not unduly trespass on the personal rights and liberties of citizens. The Act is, in fact, viewed as a co-operative effort involving the Commonwealth Government, the State Governments and Australian citizens who dive as a sporting activity or as part of their profession. This Commonwealth attempt at co-operation with the States and its diving citizens can clearly be seen from the nonmandatory nature of the Act whereby the Act applies to the waters adjacent to the coasts of all States and Territories as requested by the States. To date, 81 wrecks have been declared historic under the Act.



Sailing in the twenty-four gun frigate *Pandora*, Captain Edward Edwards was sent to the South Pacific to round up the *Bounty* mutineers and return them to England for trial. On 28 August 1791, the *Pandora* struck a reef and sank; thirty-five lives were lost.
(Sketch courtesy of the National Library of Australia)



The wreck of the *Pandora* was located at the entrance to Pandora Passage on 16 November 1977 by divers Ben Cropp and Steven Domm. In this photo, Ben Cropp is seen filming the ship's anchor on the day of the discovery. In mid 1981, the Commonwealth declared the *Pandora* an historic shipwreck, thus protecting it from salvage operations and souvenir hunters.
(Photo courtesy of Ben Cropp's Shipwreck Museum, Port Douglas, Q.)

... Should a diver locate a wreck, the Commonwealth would like to see the wreck left intact. The diver may benefit from his find by complying with Section 17 of the Historic Shipwrecks Act whereby "a person who finds, in a fixed position in Australian waters or waters above the continental shelf of Australia, the remains of a ship or a part of a ship, or an article associated with a ship, shall, as soon as practicable, give to the Minister (of Home Affairs and Environment) a notice setting out a description of the remains or of the article and a description of the place where the remains are, or the article is, situated, article to be located". Compliance with this section of the Act is a prerequisite for consideration of a reward payment ..."

NOTE: The preceding excerpt on the Historic Shipwrecks Act 1976 was taken from a report written by Jennifer Amess of the Commonwealth Department of Home Affairs and the Environment, Heritage Branch.

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FREE ISSUE No. 10

The New Queensland

(This article was provided by Mr John Wheeler, Deputy Director, Planning and

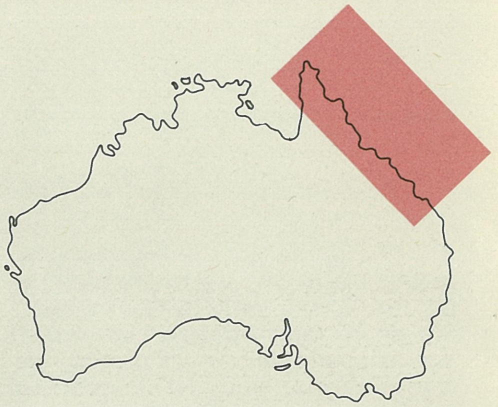
The involvement of the Queensland Government in marine conservation goes back forty-five years to an Order-in-Council of October 1937 which gave protection to the fish, coral, and other marine life around Green Island, through the initiation of Australia's first Marine Park. Heron and Wistari Reefs - which form another intensively used portion of the Great Barrier Reef were protected by Queensland legislation of the 1960's while in March 1973, Marine Park areas totalling 12,400 square kilometres were declared with a view to setting aside Marine Parks. Action on declaring these Marine Parks was well in hand at the time the Commonwealth set up the Great Barrier Reef Marine Park Authority. The Queensland Government had also protected the majority of islands by declaring them fauna reserves and many were declared Queensland National Parks.

With the co-operation of the Queensland Government, steps were initiated in 1979 to prepare a Zoning Plan for the Capricornia Section of the Great Barrier Reef Marine Park. The Zoning Plan is now in force and the Queensland Government provides the day-to-day management of the Capricornia Section on behalf of the Commonwealth, through the Queensland National Parks and Wildlife Service - Marine Parks Section, and meets a substantial part of the cost of those activities. Queensland also meets the cost of many numerous Island National Parks.

When the Commonwealth's Great Barrier Reef Marine Park Act came into operation, many people assumed that there would be less need and demand for Queensland Marine Parks, but the need has become greater than ever for the following reasons:

Firstly, the boundaries of the Great Barrier Reef Region only come in to low water mark on the mainland or on Queensland owned islands and some other vulnerable exposed reefs attached to dryland require protection of at least the same level as that presently provided under Queensland legislation at Heron and Green Islands. Besides protecting reef areas which are entirely outside the Commonwealth's jurisdiction, there is also a need to protect localities where marine boundaries are ill defined and where there may be a need for some overlap of mirror zonings in order to provide co-ordinated and adequate supervision.

A second reason for the new legislation was the widely expressed public demand for additional marine parks in numerous areas up and down the coast



- of which Pumicestone Passage is a well-known example.

With a view to facilitating cooperation, the approach taken in the Marine Parks Act, 1982 bears some resemblance to that which was followed in the Commonwealth's Great Barrier Reef Marine Park Act and will allow for zoning schemes which can mirror or complement those of the Great Barrier Reef Marine Park Authority when this is necessary or desirable. Recognition has been given to the possibility that plans in considerable detail may be involved and it is envisaged that consultants will be engaged for much of this work.

Since 1978, the Co-ordinator-General has been the Queensland Government nominee on the Great Barrier Reef

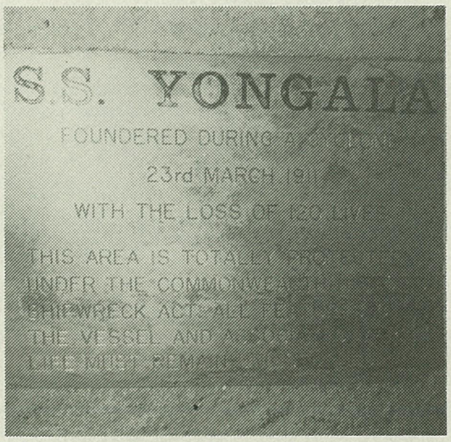
Historic Filmstar >>

She last saw daylight in 1911 and as Ron Taylor's movie floodlights drifted across the name "Yongala", we knew that Australians and the rest of the world were going to see her again.

Accompanying Ron were his wife Valerie, his assistants and scientists from James Cook University, the Australian Institute of Marine Science and the Great Barrier Reef Marine Park Authority. The two teams of divers from the "Reef Explorer" and "Velella" had rendezvoused underwater at the bow of the wreck.

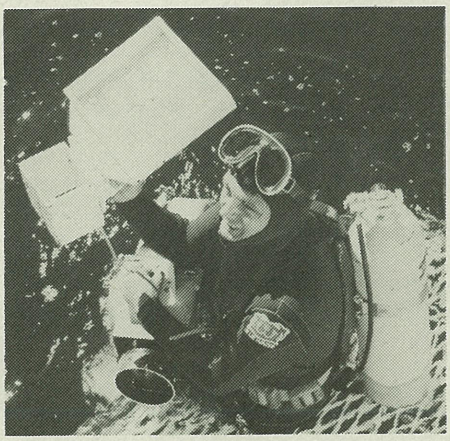
Located 10 miles east of Cape Bowling Green the *Yongala,* former pride of the Adelaide Steamship Company, lies in relative peace. The only disturbances come from the thudding sound of propellors on passing ships, and the occasional visit by a diving party.

It is expected that Taylors' film which tells the whole "*Yongala*" story will be seen on the Nine Network late in 1982. "It will be one of the most beautiful



A brass plate, placed on the *Yongala* by the Taylors, indicates that it is an historic shipwreck. *(Photo courtesy of Mike Ball Watersports Pty. Ltd.)*

films we've made", said Ron. "Not only does it feature this almost complete wreck, but also large turtles, rays, sea snakes, grouper, darting schools of pelagic fish and the hundreds of beautiful soft and hard corals which cover the wreck."



Ron Taylor on location during the filming of 'Wreck of the *Yongala*'. *(Photo courtesy of Mike Ball Watersports Pty. Ltd.)*

Dave Williams, a fish biologist from the Institute of Marine Science spoke enthusiastically of the results of his survey. "It yielded an unusual mixing of coastal fringing and offshore coral reef fish species." He emphasized the need for these populations to be

Marine Parks Act

Environment Branch, Co-ordinator-General's Department, Queensland)

Heron Island, a Queensland Marine Park protected by legislation.

Marine Park Authority, and the new Marine Parks Act provides that, subject to the Minister, the Co-ordinator-General may exercise certain functions and may also delegate functions and powers. For example, some of the responsibilities for day-to-day management in the field could be undertaken at the direction of the Co-ordinator-General by the Queensland agency which exercises similar responsibilities for the Great Barrier Reef Marine Park Authority and has officers with experience in all areas of conservation.

The Act makes no immediate change to the provisions of the existing Marine Parks around Green Island and at Heron-Wistari Reefs, but it is envisaged that, in due course, zoning and management plans prepared under the Act will complement zoning operations of the Great Barrier Reef Marine Park Authority.

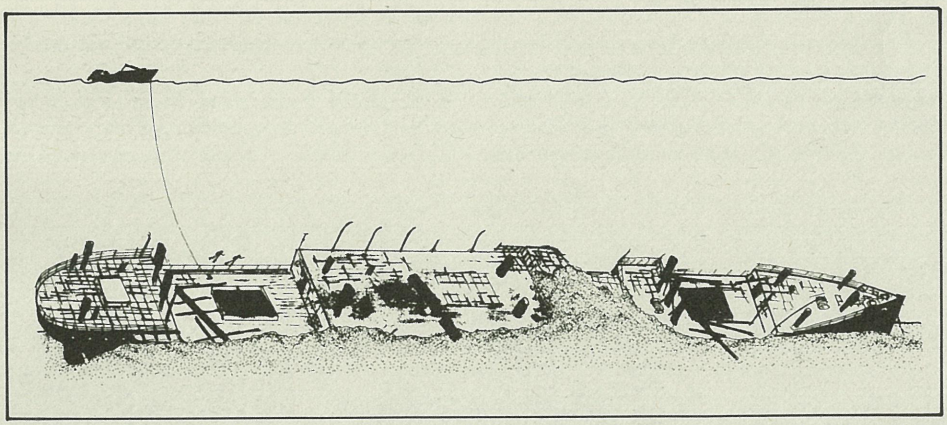
The Co-ordinator-General is responsible for making recommendations to the Minister who may define an area of interest for declaration as a Marine Park and by public notice publish particulars of the area so defined and invite submissions from the public. The Co-ordinator-General will then consider the submissions and prepare either a recommendation to the Minister that a Marine Park not be declared or, alternatively, prepare a proposal for a Marine Park which shall include a name, number or other identifying description, particulars for boundaries, the reasons for the proposal, and a zoning plan. In preparing the proposal the Co-ordinator-General is required to have regard to the needs of conservation, research and reasonable use and enjoyment.

The Minister will submit the proposal to the Governor-in-Council together with his recommendation, and the Governor-in-Council, may, by Order-in-Council, set apart and declare the area to be a Marine Park and approve the Zoning Plan.

The Act contains provisions which will facilitate day-to-day management of marine parks and will be supported by the regulations necessary for effective operation, and by appropriate arrangements for day-to-day management. Thought is at present being given to the priorities which should be given to particular locations.

The Marine Parks Act demonstrates once again the commitment of the Queensland Government to marine conservation and the intention to ensure, in co-operation with the Great Barrier Reef Marine Park Authority, that Queenslanders and other Australians as well as visitors from other lands may enjoy the best marine park system in the world.

>>>>>>>>>>>>>>>The Yongala Wreck



In 1974, marine biologist Dr Leon P. Zann did extensive diving on the *Yongala*. His artistic impression of the wreck appears above. The sand that covers the side of the liner in the sketch has since shifted.
(Sketch courtesy of Dr L. P. Zann)

protected from all forms of fishing. "They would be highly susceptible to overfishing and very slow to recover, if indeed they'd recover at all."
The "*Yongala*" was declared an Historic Wreck by the Australian Government in 1981. It was first discovered in 1945 by a minesweeper clearing shipping lanes. Subsequent visits by salvage divers have removed the safe, wheel, lights, many of the portholes and other easily removed items. These items are now listed as historic, and have been made known to the Minister for Home Affairs and Environment.

Some Suggestions For Further Reading About Shipwrecks

EDWARDS, Hugh. **The Wreck on the Half-Moon Reef.** Rigby, 1970.

FIDLER, Kathleen. **Wrecks, Wreckers and Rescuers.** Lutterworth Press, 1977.

GREEN, Jeremy. **Treasures from the Vergulde Draek.** (Gilt Dragon). Western Australian Museum, 1974.

HALLS, Chris. **Australia's Worst Shipwrecks.** Rigby, 1978.

HOLTHOUSE, Hector. **Ships in the Coral.** Macmillan.

LONEY, Jack. **An Atlas History of Australian Shipwrecks.** (State-by-State including Maps and Diving Notes). Reed, 1981.

THROCKMORTEN, Peter. **Diving for Treasure.** Thames and Hudson, 1977.

Artificial Reefs

Artificial reefs have long been associated with shipwrecks, however, the artificial reef concept extends far beyond the accidental sinking of a ship. In the following excerpt from the "Guide to Artificial Reefs", *(N.S.W. State Fisheries Leaflet* **6***)*, Dr David Pollard, a senior Fisheries environmental scientist discusses the history and development of the artificial reef concept.

" ... Before discussing the history and development of the artificial reef concept, maybe I should outline what I understand by the term artifical reef.

I would define it as "a structure placed by man on the sea floor for the purpose of increasing or concentrating populations of fishes or other animals or plants of recreational or commercial fishing importance in its vicinity".

Here I have used the phrase "for the purpose of increasing or concentrating"', rather than "which increases or concentrates" deliberately, as I don't regard what I call "accidental" reefs as artificial reefs in the true sense, and therefore don't intend to discuss them here except in passing.

Such accidental reefs have, of course, been with us since prehistoric times; at least since man first ventured onto the sea in boats. Shipwrecks several millenia in age, still loaded with their cargoes of terracotta storage jars or amphorae, have been discovered in the Mediterranean still functioning well today as accidental man-made reefs. Indeed, the city of Atlantis, if it ever did exist, probably also made an excellent man-made reef in this 'accidental' category when it went under.

What I am going to discuss in some detail then is the category of intentionally constructed artificial reefs, though no doubt the concept of such structures originated from observations on the effectiveness of accidental shipwrecks in improving fishing in their vicinity ...

Probably the first people to act on this common observation, that a shipwreck is usually a good fishing spot, were the Japanese, who have now been building artificial reefs for at least two centuries.

...artificial reefs in Japan are constructed almost solely for the purpose of enhancing commercial fisheries ...

In the U.S.A., the first recorded construction of an artificial reef was around 1860 ...

Since that time, ... the development of artificial reefs in the U.S.A. has been oriented almost exclusively to the needs of recreational fishing ...

The first serious scientific evaluation of the effectiveness of artificial reefs was carried out during the late 1950's and early 1960's by biologists from the California Department of Fish and Game (Carlisle, Turner, Ebert and Given). They reported two to three times greater fishing success on their artificial reefs compared with nearby natural reefs.

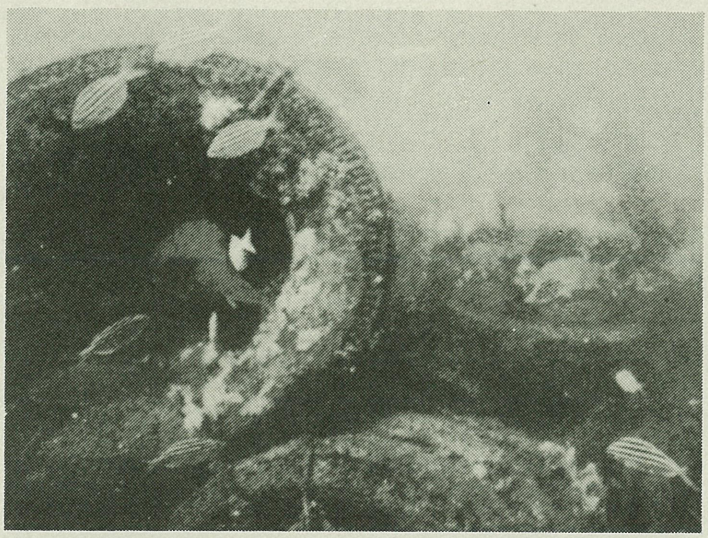
Another researcher who carried out some interesting work around this time was Dr Jack Randall, who constructed an artificial reef of 800 concrete blocks in the Virgin Islands in 1960. A little over two years later he collected almost 200 lb of fish from this reef using fish poison, which was over 10 times the weight present on two equivalent areas of nearby natural reef which he also sampled ...

It is in the light of the results of these overseas studies that fisheries biologists in several Australian States have recently begun experiments designed to evaluate the usefulness of artificial reefs in Australian waters ...

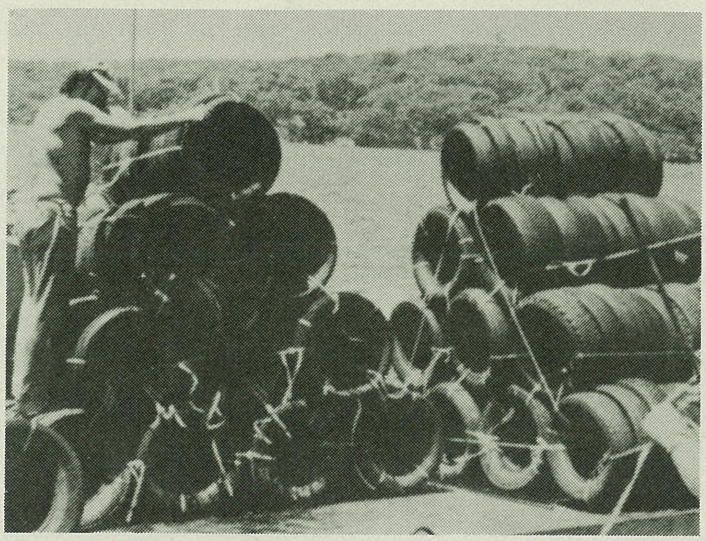
The first Australian artificial reef appears to be that which was laid in Port Phillip Bay in 1965, about 8 kilometres off Carrum on the Bay's eastern shore. This reef, which was laid in about 20 metres of water, consisted of 300 or so concrete pipes, some of them up to 2.5 metres long and 1.8 metres in diameter, and together weighing about 400 tonnes; some derelict boats and concrete rubble were added later. This reef was apparently designed specifically to improve snapper *(Chrysophrys guttulatus)* fishing in the area, but due to what I would regard as bad site selection, the pipes were dropped on too soft a substrate, where most of them reportedly became buried in the bottom; and they were apparently scattered over too wide an area ...

In Queensland, local angling, skindiving and boating interests constructed a large artificial reef in Hervey Bay, near Maryborough, in 1968. This reef consisted of 220 car bodies, 10,000 tyres, 3 derelict wooden barges (between about 30 and 70 metres in length), 400 tonnes of concrete rubble, and 12 concrete "fish houses". Another similar reef was constructed by the Underwater Research Group of Queensland with the help of a Citizen Military Forces Water-Transport squadron, the Queensland Littoral Society and some Brisbane diving groups. The reef was placed near Cowan Cowan Point on the western side of Moreton Island in about 20 metres of water in 1968. It consisted of three derelict ships, 50 car bodies, several barges, thousands of tyres, and a quantity of concrete rubble.

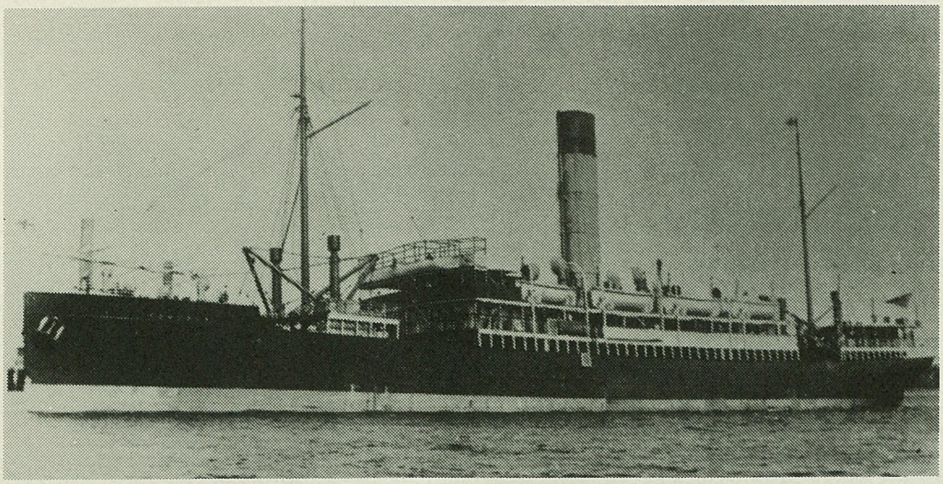
Both these reefs have been added to, and angling is apparently quite good at both sites. *(Cont. opposite page)*



Fish using a well-established tyre reef. ***(Photo courtesy of NSW State Fisheries)***



Construction of tyre bundles for addition to an artificial reef site at Port Hacking, NSW. ***(Photo courtesy of NSW State Fisheries)***



"... Several theories were suggested by witnesses (well-known shipmasters) as to the cause of the disaster, notably the vessel striking a reef or, owing to some mishap, rendered helpless in the vortex of the storm; but as they were merely conjectures, it is not possible to allow them any consideration; and while it is both gratifying, and reassuring that the vessel's stability and seaworthiness remain unassailable, and the competency and carefulness of Captain Knight unimpeachable, the Board, with no desire to indulge in idle speculation, simply find that, after becoming lost to view by the lightkeeper at Dent Island, the fate of the *Yongala* passes beyond human ken into the realms of conjecture, to add one more to the long roll of mysteries of the sea." (Marine Board of Brisbane, 20th June, 1911)

(Photo courtesy of Mr Peter Bell, Department of History, James Cook University of North Queensland)

Additional Protection for the Capricornia Section

(Statement by the Minister for Transport, the Hon Ralph J Hunt, MP and the former Minister for Home Affairs and Environment, the Hon Ian Wilson, MP, issued 27 April 1982.)

International shipping will soon recognise part of the Capricornia Section of the Great Barrier Reef Marine Park as an area which large ships should not enter.

In a joint statement the Minister for Transport, Mr Hunt and the former Minister for Home Affairs and Environment, Mr Wilson said that the Intergovernmental Maritime Consultative Organization (IMCO) had provisionally approved last week that the central portion of the Capricornia Section should be regarded as an "Area to be Avoided" by ships of over 500 tons gross tonnage.

The joint statement continued, "Although the international maritime community jealously guards the traditional freedoms of navigation, it also shows a willingness to acknowledge that some areas are deserving of special protection. Its acceptance of the Australian proposal for special treatment for this area also indicates a growing international awareness of the importance of the Great Barrier Reef."

The IMCO "Area to be Avoided" coincides with the area which the Zoning Plan for the Capricornia Section stipulates should not be used by large ships without special permission.

Artifical Reefs cont.

In fact, some of my colleagues from N.S.W. State Fisheries and I had the opportunity to dive on both of these reefs several years ago and they certainly appeared to support good fish populations. The Hervey Bay reef also provided some moments of excitement for us southerners, as on our N.S.W. reefs we usually don't have the pleasure of being chased through rows of sunken Holdens by 1.5m olive seasnakes ...

Introductory Guide to Life on The Great Barrier Reef

The Great Barrier Reef Marine Park Authority takes pride in announcing the recent publication of "An Introductory Guide to Life on the Great Barrier Reef". This handsome guide provides an easy-to-read photographic key for identifying 36 of the Reef's most familiar creatures. It is a must for anyone visiting in the Reef.

The guide is available in lots of 100, in both waterproof and paper versions. For further information, please contact:

The Information Officer,
Great Barrier Reef Marine Park Authority,
P.O. Box 1379, TOWNSVILLE, Q.4810
(077) 71 2191

Removal of Wrecks Capricornia Section

If you are ever in the unfortunate situation of running aground on a reef in the Marine Park, your first reaction will naturally be to save your boat and its passengers. If the situation is an emergency, then a permit is not required. If, however, your radio is working you should inform the Queensland National Parks and Wildlife Service of the situation, either directly or through another responsible authority such as: the Boating and Fisheries Patrol, the Australian Volunteer Coast Guard or the Department of Harbours and Marine.

Within the Capricornia Section, the Zoning Plan and regulations provide for the removal of vessels which are wrecked, stranded, sunk or abandoned from any zone, with the permission of the Marine Park Authority or its delegate. This means that a permit is required to remove a wrecked vessel, except in cases of emergency where a person reasonably believes that the immediate removal of the vessel would:

- *save a human life or avoid risk or injury to a human being;*
- *secure the safety of the vessel from danger caused by stress of weather or by navigational or operational hazards; or*
- *deal with an emergency involving a serious threat to the environment (applies only to persons authorised under Great Barrier Reef Marine Park legislation).*

A permit is required for the removal of a wrecked, stranded, sunk or abandoned vessel because this is an activity which could seriously damage reefs. A permit is also required for the removal of fittings and cargo.

The delegate of the Authority for the issue of permits for removal of wrecks is the Director of Marine Parks, Queensland National Parks and Wildlife Service.

In cases where it is possible to refloat a vessel or salvage it whole, the following precautions should be taken:

- *do not use explosives to remove sections of reef;*
- *avoid dumping fuel; if this is essential to the safety of the vessel and/or its passengers, try to dump in deep water;*
- *if you need to remove loose boulders around a stranded vessel, make sure that they are left same side up elsewhere.*

Boating accidents which involve loss or damage to property and/or human injury must be reported in person or by telephone to the Department of Harbours and Marine within forty-eight hours.

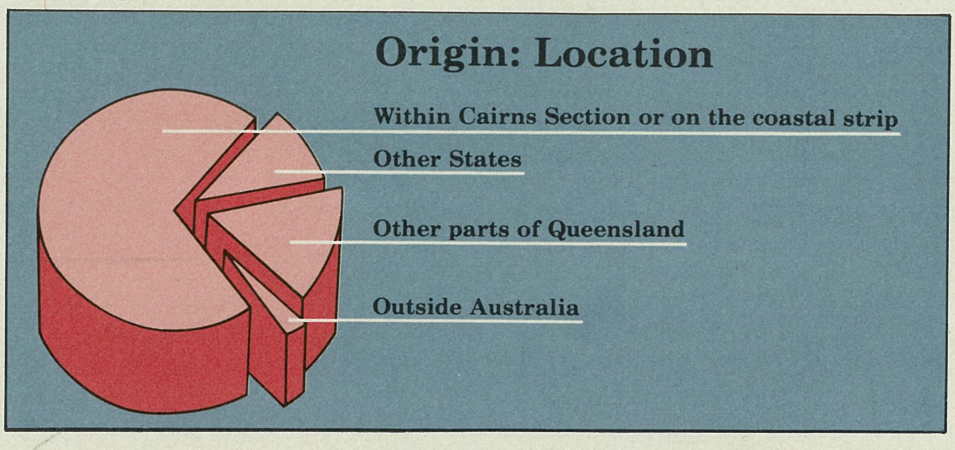
When in the Capricornia Section, the closest Harbours and Marine offices are located in Bundaberg, Gladstone or Rockhampton.

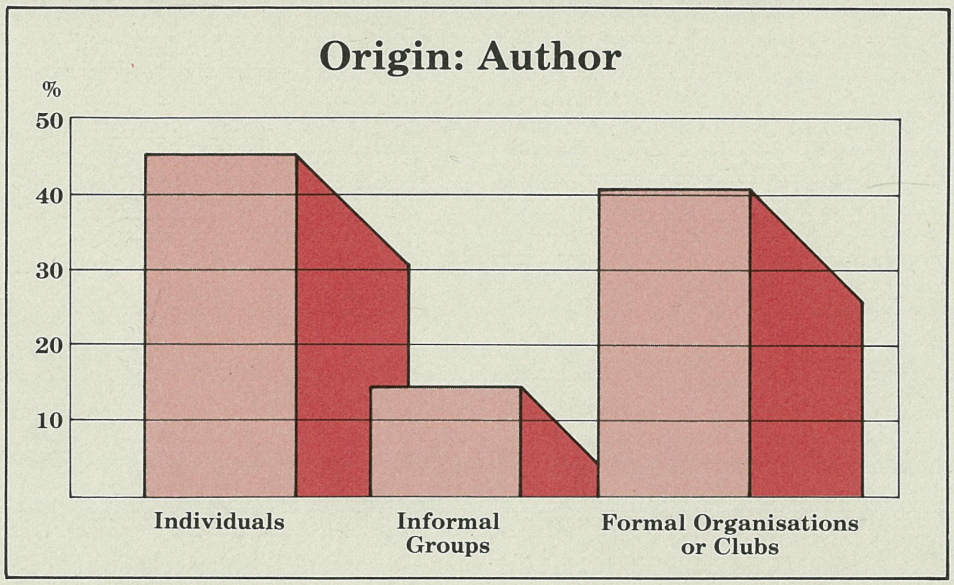
Cairns/Cormorant Pass Public Participation: A Description of Representations Received

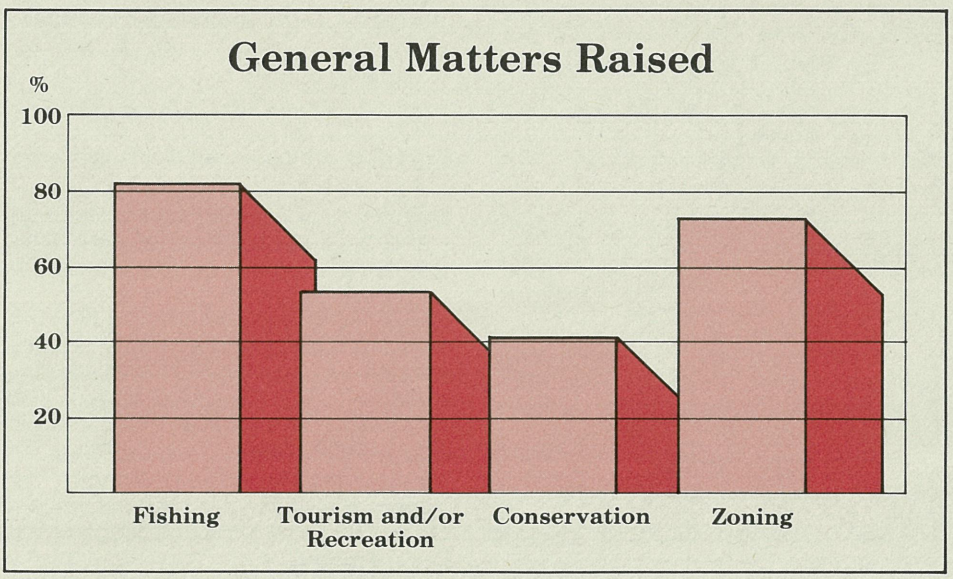
During the second phase in the development of the Zoning Plans for the Cairns and Cormorant Pass Sections the Authority conducted a public participation program, 'Help Zone the Reef'. This began shortly after the Sections were proclaimed. The public and particularly users of the Sections were invited to provide detailed information in response to the following specific questions:

- *Which offshore areas, reefs and waters are important to you - and which are not important?*
- *Which offshore areas, reefs and waters do you use most frequently or would you prefer to use for your activities?*
- *What activities do you undertake, or would you like to undertake within the Cairns and Cormorant Pass Sections?*
- *What activities, if any, conflict with your activities?*
- *How do you travel to the reef and from where do you depart?*

In response, 202 representations were received. They ranged from the comments of individuals and organisations to a formal statement of issues which the Queensland Government considers important in development of the Plans. A brief description of the representations received is presented in the following series of graphs.







Teachers' Handbook To be Developed

At its 49th meeting, the Marine Park Authority funded Stage I in the development of a Teachers' Handbook for Great Barrier Reef Fieldwork - Capricornia Section.

Work on the project is being carried out by a team consisting of Queensland and New South Wales schools, C.A.E. and museum personnel with teaching backgrounds in biology, geology, geography, oceanography and environmental education.

The main aim of the handbook will be to help teachers plan and conduct fieldwork for senior school students in the southern part of the Great Barrier Reef Region. It will be directed mainly to teachers of groups who actually visit the Reef and will emphasise first-hand reef experience.

In developing the handbook, the Project Reef-Ed Team hopes to provide interested teachers with:

- advice on logistics and other aspects of Reef fieldwork planning and management;
- consideration of various educational objectives which can be achieved through reef fieldwork by school groups; and
- detailed treatment of educationally worthwhile activities which senior school students can carry out in reef environments.

School, university, C.A.E., T.A.F.E., museum and research organization personnel, and others interested in reef education, are invited to become involved in the Project by:

- making known their ideas on directions the Project should take;
- contributing existing reef teaching materials to the Project;
- preparing new reef teaching materials for the Project;
- providing opportunities for activities to be trialled by student groups; and
- examining and commenting on provisional versions of Project materials.

FOR FURTHER INFORMATION
Contact:
The Information Officer
Great Barrier Reef Marine Park Authority
PO Box 1379
TOWNSVILLE QLD 4810
Telephone: (077) 71 2191

NEW OFFICE FOR THE AUTHORITY

On 21 June, staff of the Authority moved to new offices in Melton Place, located on the corner of Denham Street and Melton Terrace, Townsville. In addition to providing increased space and improved surroundings, the new building also offers shop-front accessibility to the public. Drop in and see us.

Research Review

Each year the Authority funds a variety of research projects in an effort to gather information relevant to planning and management of the Marine Park. This year over 60 research projects have been funded amounting to nearly $200,000.

To keep our readers informed of some of the projects underway, we are introducing "Research Review" as a regular feature of 'Reeflections'.

The aim of the two-year research project, "Tourist Impact on Reef Corals" presently being carried out at Heron Island by Dr. Alice Kay and Dr. Mike Liddle of the School of Australian Environmental Studies at Griffith University, Brisbane is to determine the effect of human trampling on coral reef flats.

Dr. Kay and Dr. Liddle will be investigating:

1. whether the present level of human trampling on the frequently visited portions of the Heron Island Reef flat has altered the structure of the coral community;
2. how different levels of human trampling affect the coral communities on the reef crest and outer reef flat; and
3. the characteristics of common coral species which are directly concerned with a colony's resistance to, and survival after, physical damage inflicted by human trampling. These will include such things as the ability of a broken off coral fragment to survive, reattach and grow, and the hardness of a coral's skeleton.

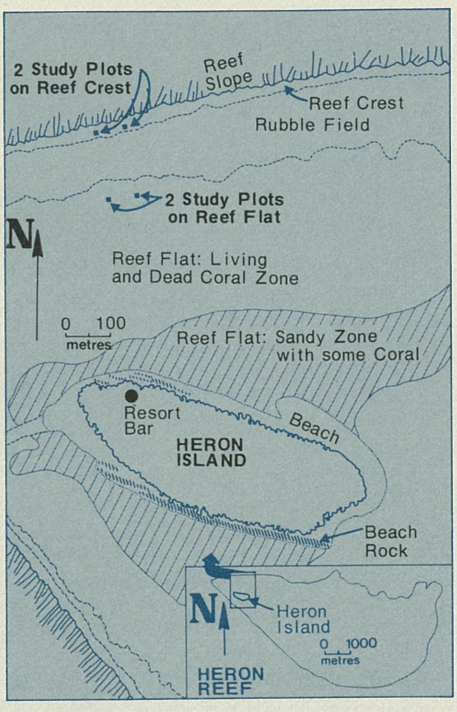
In explaining how the research would be carried out Dr. Kay said "We are using an experimental approach. The composition of the coral community on the reef flat around Heron Island is too patchy for us to assume that the differences between two or more areas can be attributed to the number of people which have walked over them in recent years. There are no records telling us what the reef flat was like before the introduction of tourists."

"We will be doing our own trampling under controlled conditions, imitating 'real' trampling as closely as possible. Immediate damage will be measured and long term changes monitored. In particular we hope that our experiments with individual coral species will allow us to predict how reefs of different composition will react to human trampling."

It is hoped that results of the project will provide valuable information which will enable better management of reefs used throughout the Region.

Dr Alice Kay marks out the area in which she and Dr Mike Liddle will trample coral 'under controlled conditions'.

Dr Kay measures the damage to trampled coral. Over the next two years she will monitor long-term changes to the coral.



(Map courtesy of Dr Mike Liddle and Dr Alice Kay)

Drift Card Study

What should you do it you find a card sealed in plastic bags with a nail at one end and a styrofoam float at the other?

Read the message, fill in the details requested and then post it, that's what!

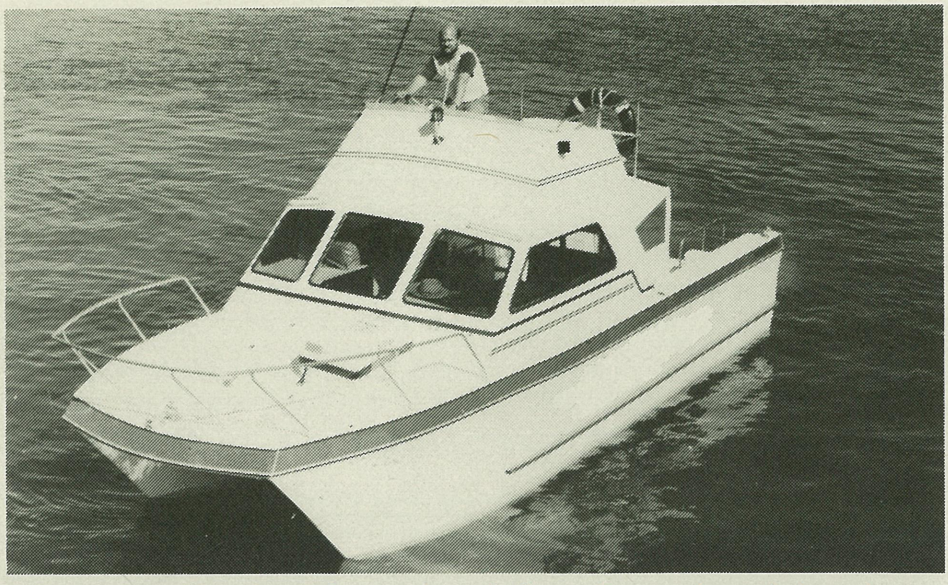
Such "drift cards" are part of a two-year study of Great Barrier Reef surface currents presently being carried out by Dr John Collins, Dr Terry Walker and a research team from James Cook University. The project, funded by the Authority, is important to the management of the Great Barrier Reef Region since it will:

1. increase our understanding of surface water movements in the Great Barrier Reef Region;
2. provide data for predictive models of the movements of materials floating on or in the surface layers of the water such as oil slicks, marine larvae and floating wreckage; and
3. provide an extensive set of data collected from a wide geographic area which will provide a valuable basis for the design of more precise water movement studies within the Region.

Since November 1981, drift card drops have been made by Reprographics Pty Ltd, the firm conducting surveillance flights of the Great Barrier Reef for the Australian Coastal Surveillance Organisation, at 13 standard release stations within the Region. It is expected that some 90,000 cards will be released at monthly intervals over a 17 month period, with the project being completed in June 1983. Already one fisherman has benefitted from the program. When searching for a lost fisherman in the northern Great Barrier Reef Region, a Reprographics pilot remembered the pattern of surface drift shown by the drift cards. He flew in that direction and rescued the fisherman within an hour.

Notes On Capricornia

New Boat for Marine Park



A Power Cat with twin 175 h.p. engines similar to the one pictured above, is soon to be ready for use within the Marine Park. Purchased by Queensland National Parks and Wildlife Service with funds provided by the Commonwealth Government, the boat will provide overnight accommodation for up to four persons and will greatly enhance management efforts within the Marine Park. Due to be commissioned and launched later this year, the boat has been named *Protector II*.

Managing The Marine Park

During early December 1981, the Central Queensland Express interviewed Mr Kevin Bade, the Regional Superintendent of Queensland National Parks and Wildlife Service (Rockhampton), about the Capricornia Section of the Great Barrier Reef Marine Park. An updated version of that interview follows, courtesy of *The Express*.

Q. How long have moves been underway to have the Great Barrier Reef declared a Marine Park?

A. For about the last six years. The Capricornia Section was declared about 12 months ago. That is the Section we monitor.

Q. Is the Capricornia section of the Great Barrier Reef Marine Park controlled by your Department?

A. No. The Marine Park Authority controls the area. They have offices located at Canberra and Townsville. It's a Commonwealth Government instrumentality. The Queensland National Parks and Wildlife Service is responsible for the day-to-day management of the area.

We manage the area within the legislation of the Federal body. Liaison has always been good. We all have a good working relationship.

Q. How is the declaration of a Marine Park going to affect users of the Reef?

A. It shouldn't affect most users of the Reef. The major restrictions on the Capricornia Section are the prohibition of oil drilling, commercial spear fishing, spearfishing with SCUBA and one island is closed for scientific purposes (One Tree Island), and one for preservation (Wreck Island).

Q. What restrictions does it place on tourists and fishermen?

A. Commercial spearfishing and spearfishing with SCUBA are the only fishing activities not permitted anywhere within the Marine Park. The Zoning Plan for the Capricornia Section provides for all reasonable uses to continue.

About 80% of the area is without restriction, except that mining and commercial spearfishing are not permitted anywhere.

Recreational activities, such as diving, snorkelling and reef walking are permitted throughout the Section except in the Scientific Research Zone, the Preservation Zone, or in a Seasonal Closure Area that has been declared closed.

Marine Park Staff

Queensland National Parks and Wildlife Service is soon to appoint several Marine Park Officers and Technicians to carry out management activities within the Capricornia Section. The Marine Park Officers will be responsible for management of the Section, with duties relating to interpretation (environmental education), monitoring, surveillance, law enforcement, planning and research. They will be assisted by Marine Park Technicians in carrying out these duties.

The new Officers and Technicians will be based in Rockhampton, but will operate in the Marine Park from a field station at Heron Island.

DON'T FORGET SAFETY GEAR
(courtesy Harbour & Marine Board)

A booklet entitled *Under Capricornia* provides all the necessary information and is available at our office.

Q. How do you manage to maintain complete surveillance of the area?

A. We are working toward a total surveillance of the area. At present we have one main patrol boat, the "Shearwater II", which undertakes a patrol about once a month on the average. We hope to get an additional ten staff by June 1982 and four more by early 1983.

Q. Do any staff of the service live in the area?

A. Not at the moment. That is something we're working toward. We're looking to develop headquarters on Heron Island and visitor facilities on Lady Musgrave and Masthead Islands.

Q. Do officers of the Service find much damage is done by visitors and tourists?

A. To date very little damage has been done to any of the islands. Any damage we do find is mostly inadvertent, like disturbing nesting seabirds. A quarter of our time would be spent patrolling the Capricornia Section. The rest of our time is spent 'on land', or on regular patrols of the Keppel Islands.

Q. What other sort of work do you do?

A. Most of our job is monitoring the area. We talk to campers, fishermen and boaters and keep an eye on things that way.

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