

Coralines

AQUARIUM SUPPORTERS' MAGAZINE



GREAT BARRIER REEF
AQUARIUM



A dugong grazes on seagrass.

Photo by D. Yates

WHAT'S HAPPENING TO DUGONGS?

WHAT IS A DUGONG?

These unique marine mammals can grow to about three metres in length and weigh as much as 400 kilograms. They are sometimes called sea cows because they graze on seagrass. Closely related to elephants, these large mammals occur in shallow, tropical waters with most of the world's dugong population found in Australian waters between Shark Bay in Western Australia and Moreton Bay in Queensland.

PART OF THE PROBLEM

Dugongs can live to an age of about seventy years. The female starts breeding some time between the ages of ten and seventeen years. The gestation period of thirteen months with rests of up to three years between calves only makes the future of dugongs more tenuous.

CURRENT STATUS

Dugongs are currently facing extinction. Natural factors such as disease, predators and cyclones have always contributed to dugongs' deaths. Recently, human intervention has increased the number of deaths to the current situation where deaths outnumber the births. One of the factors contributing to the decreasing numbers is the loss of seagrass meadows due to the dumping of dredge waste and the discharge of silt from coastal rivers. Trawling by commercial fishing vessels also affects the staple diet of the dugong. Other factors causing dugong deaths include nets set to catch sharks in swimming areas (dugongs hold their breath for only eight minutes and once netted, a dugong will quickly drown); and strikes by boats.

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DUNK ISLAND GETAWAY

Dunk Island is that wonderful tropical island just a little north of Townsville. Unlike your family trips, the Members' Dunk Island Getaway takes care of everything for you. Leaving from the Wonderland at 7.00 am and travelling in air conditioned coaches with a quick stop at Frosty Mango to refresh your taste buds, the coaches will safely deliver you to Mission Beach. Armed with your swimmers, sunburn cream and sunglasses, you'll enjoy a cruise to beautiful Dunk.

On Dunk you can explore the rainforest and beaches at your leisure as well as take advantage of watersports like parasailing and water skiing.

Seats are limited; you must ring immediately to ensure you don't miss out! Please refer to the Members' Program for further details.



Beautiful Dunk Island

Photo courtesy of Townsville Enterprise

SULTRY SALSA



The reef is magical at night.

Photo by Murray Cornish

A special cocktail function with you in mind. After a busy workday you need the calm and relaxing atmosphere of the Aquarium to energise yourself. Of course, sipping champagne, tasting culinary delights, participating in entertaining cooking demonstrations and winning a few prizes will also help!

Children are not the only ones who get to dress for themed events at the Aquarium – now it's the adults turn! The theme is sultry so come dressed appropriately for the night (try tropical!). The best dressed ladies' and men's prizes will tickle you...



Mother's Day is very special at the Aquarium.

MOTHER'S DAY BREAKFAST

Show your mum how much you care about her and shout her a delicious hot breakfast at the Aquarium surrounded by the waking beauty of the coral reef. With the sunlight dancing on the

coral in front of your eyes, you may not wish to return home.

Menu consists of bacon, eggs, danish pastries, fruit and hot coffee. Oh... and you can leave the washing-up to us.

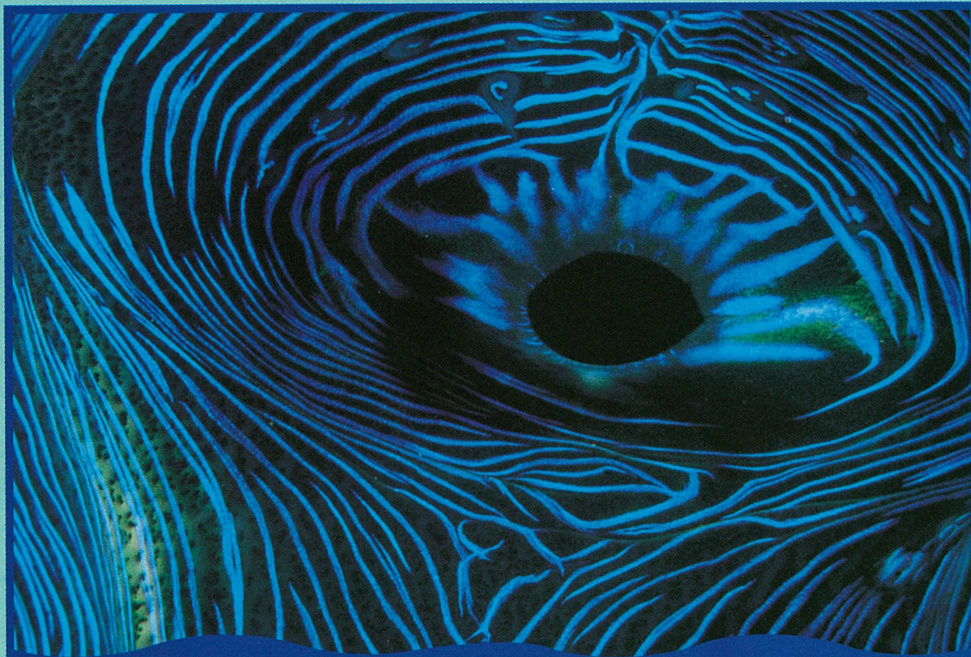
GIANT CLAMS AS BIO-INDICATORS

Giant clams are an important component of subsistence fisheries around the world and are currently under threat of extinction. Clams accumulate in their body tissue chemical substances from the surrounding water which provides excellent evidence of the conditions in which the clams exist and the general health of the reef ecosystem. Clams have recently been exploited to near extinction. To counteract this, the James Cook University research station at Orpheus Island has cultured and maintained hundreds of clams for major clam relocation exercises. These exercises have been carried out by the Great Barrier Reef Marine Park Authority and the Aquarium from 1992 through to 1995.

The Aquarium research program—*Clams as bio-indicators*—continues this

year with the assistance of the *Spirit of Sydney*, an ice breaker from the Australian Antarctic Division. From 4 - 22 July, Aquarium research staff will visit seven sites to record changes in the cultured clams relocated from Orpheus Island research station. The project is part of a long term conservation strategy and involves periodic monitoring of growth and survival rates. Clam sizes, weights and blood and tissue samples are taken to ensure identification in the following season and are compared with clams at the Aquarium where the environmental conditions are tightly controlled and monitored.

Clams as bio-indicators represents part of the Aquarium's and the Great Barrier Reef Marine Park Authority's long term aims for ecologically sustainable reef management.



A close view of a clam's tissue—known as the mantle—and the syphon shows the beauty of the creature.

FIRST AQUARIUM RETIREE

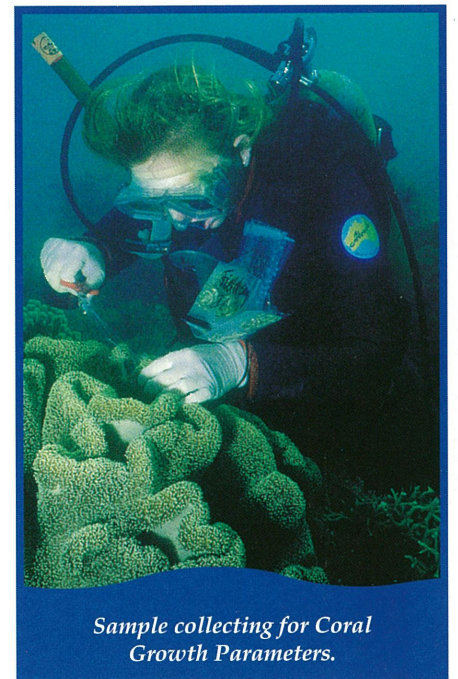
Charles Nelson, alias Chick, retires in May. Our Chick is a bit of a diving legend and at the age of sixty-five he is the oldest occupational diver that we know of! Part of the original team that was contracted to collect sand, rocks and all the marine critters to fill the

exhibits; Chick has warmed the hearts of thousands of visitors to the Aquarium since its opening. He has entertained and helped educate people—in his own unique way—about the importance of reef conservation and management. Chick, you will be dearly missed.

CORAL HEALTH

The Aquarium research program is committed to ensuring the coral reef environment created 10 years ago duplicates nature as closely as scientific knowledge allows. A component of the program, the *Coral Growth Parameters* experiment focuses on factors affecting the growth and survival rates of corals.

To our long term Members this probably sounds familiar, but in short, the *Coral Growth Parameters* experiment documents the health and survival rates of the acroporid corals under different light and water quality conditions. The results of the series of experiments will allow Aquarium staff to provide the right conditions for corals in the Coral Reef Exhibit.



Sample collecting for Coral Growth Parameters.

CURRENT STATUS

A fulltime intern will soon be contracted for six months to assist with the experiment, document observations and measurements and collate data. Aquarium figures show that the coral survival rate in the Coral Reef Exhibit is 80% per year, while the survival rate on the Great Barrier Reef is 85%. Funded by the Aquarium and the Great Barrier Marine Reef Park Authority, *Coral Growth Parameters* assists the Authority to achieve its aim to better understand coral and reef health.

◆ DAILY PROGRAM ◆

APRIL 1997 – JUNE 1997

THEATRETTE PRESENTATION OF THE GREAT BARRIER REEF

This show is a fantastic introduction to reef life. Take 15 minutes to acquaint yourself with the complexities of a coral reef ecosystem.

Time: 9.30 am, then hourly from 10.00 am to 4.00 pm every day
Cost: included in Aquarium admission

DIVER TALKBACK SHOW

Talk to the divers while they are underwater in the Coral Reef Exhibit. Hear some amazing stories and have your questions answered from inside.

Time: 10.30 am daily
Cost: included in Aquarium admission

DISCOVERY TOUR

Take a tour of discovery through the Aquarium with experienced reef interpreters. Unravel the mysteries of the reef and the secrets of keeping a living reef on land.

Time: 11.20 am and 2.20 pm daily
Cost: included in Aquarium admission

SHARK FEEDING

It's always an exciting time when the predators are being fed. Sharks, trevally, the huge 200 kg grouper and a friendly turtle vie for food.

Time: Every Sunday, Tuesday and Thursday at 3.30 pm
Cost: included in Aquarium admission

KIDS' CORNER

A special place for the young and the young at heart and every month we have a different theme. There is no age limit to having fun!

Time: Saturday and Sunday 11.00 am – 12.00 pm, and 2.00 pm – 3.00 pm
Cost: included in Aquarium admission

TURTLE FEEDING

Come up to the Contact Zone and learn how these beautiful baby turtles are reared.

Time: 12.20 pm every day
Cost: included in Aquarium admission

ANIMAL FEEDING TOUR

Join the Aquarists as they handfeed a variety of marine creatures such as the deep sea nautilus, crayfish and sea snakes. Our routine varies so please phone to check the program.

Time: week one – Tuesday and Saturday at 3.20 pm
week two – Wednesday and Sunday at 3.20 pm
Cost: included in Aquarium admission

PREDATOR DIVES

Come face-to-face with some of the ocean's predators. Spotting a shark while diving is rare, at the Great Barrier Reef Aquarium it's a guaranteed experience! An exciting 20 minute dive, you'll swim with reef sharks, leopard sharks, a huge 200 kilogram grouper – fondly known as *Dominator* – stingrays, trevally and a very inquisitive turtle. You must show your Diver 'C' Card and gear can be hired.

Time: Every Wednesday and Saturday at 8.45 am, 9.30 am and 10.20 am.

Cost: Members \$55.00 Non-members \$65.00
which includes admission to the Aquarium

Bookings: You need to book a minimum of 24 hours before your dive. Book at the Great Barrier Reef Aquarium shop or phone The Dive Bell on 211 155.

Maximum group: 6 people per dive session



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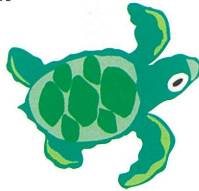
MEMBERS' PROGRAM

FOR FURTHER INFORMATION AND BOOKINGS PLEASE CALL
WEEKDAYS 500 800 AND WEEKENDS 500 875

MOTHERS' DAY BREAKFAST

Every Mother is special, every day! Pamper your mum and show her how much you appreciate her cleaning, taxi service, counselling, financial advice, catering, home accountancy and accommodation management!

Date: 11 May
Time: 7.30 am
Cost: Adults Children
\$14.00 \$9.00
Family (2 adults + 2 children) \$40.00
Bookings close: 8 May



DUNK ISLAND GETAWAY

Dunk Island is home to lush national parks, gorgeous sea views and the beautiful ulysses butterfly. Prices listed below are inclusive of the bus trip, lunch and the boat trip.

Date: 17 May
Time: 7.00 am to 7.30 pm
Cost: Members Non-members
Adults: \$60 (save \$38) \$80 (save \$18)
Children 4 - 10 years \$33 \$40
Children 11 - 14 years \$40 (save \$5) \$45
Age group: 4 years and above
Maximum group: 40 people
Bookings close: 12 May

UNDERWATER DREAMERS

Shipwrecked sleepover for children
For those scallywags that missed out on the last themed sleepover, this is your chance to learn to survive the hardships of a deserted island!

Date: 23 May
Time: 7.00 pm - 8.00 am
Cost: Members Non-members
1st child \$26 \$32
2nd child \$22 \$27
3rd child \$20 \$25
Age group: 6 - 12 years
Maximum group: 30 children
Bookings close: 19 May

CORAL REEF BIOLOGY

This two day course is designed to introduce you to the richest and most diverse ecosystem on earth. Learn about many of the animals inhabiting the reef and how they interact and adapt to their environment. The program includes how corals build reefs; reef relationships and food webs; sharks, rays and fish; marine reptiles and reef management.

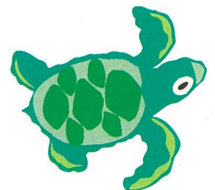
Date: 17 & 18 May inclusive
Time: 1.00 pm - 5.00 pm Saturday
9.00 am - 1.00 pm Sunday
Cost: Members Non-members
\$65 \$70
Students & Pensioners \$60 \$65
Age group: 15 years and above
Bookings close: 16 May



SULTRY SALSA

Discover the secrets of cooking fantastic seafood cuisine and then taste the culinary delights. Wander through the Aquarium with a glass of wine to the ambience of a string quartet.

Date: 30 May
Time: 7.30 pm - 9.30 pm
Cost: Members Non-members
Adults \$40 \$45
Bookings close: 26 May



NIGHT STALKERS

This popular night program is aimed at fun for the whole family. Bring your torches along to discover what creatures lurk in the night... come dressed to suit the theme of *the deep*.

Date: 13 June
Time: 7.00 pm - 9.00 pm
Cost: Members Non-members
Family \$20 \$30
(2 adults + 2 children)
Adult \$8.50 \$18
Child \$5 \$10
Age group: suitable for the whole family
Bookings close: 9 June



GREAT BARRIER REEF
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Aquarium Members' Program is proudly sponsored by



AQUARIUM'S FIRST GOLD SPONSOR!

TEN Queensland has become the Aquarium's first Gold Sponsor. This is part of the new Sponsorship Program being launched this year, the year of our 10th birthday celebrations. Thanks to this partnership, you'll be seeing the Aquarium on a regular basis on channel TEN. Tune in!



Aquarium Director Martin Jones with TEN Queensland General Manager Alec Linning



A beautiful dive; the Palm Islands were visited recently by Aquarium staff.

FIELD TRIP

Aquarium staff visited the Palm Islands in early April for a collection trip. Collecting corals during the cooler months increases the success rate of transferring them from the reef to our exhibits. The number of

collection trips and the quantity of specimens collected has decreased greatly compared to the Aquarium's early days of operations. A successful tour, the team chose various hard and soft corals from nature's excellent selection.

CYCLONE JUSTIN

The Coral Reef Exhibit survived 320 mm of rain from cyclone Justin recently. Greater control of salinity levels in the reef exhibit during the dry months achieved the balance required to maintain over 3000 species of coral reef creatures. A good test run.

TURF FARM REBUILD

The algal turf farm (individual units are called scrubbers because they literally 'scrub' the water clean of nutrients and carbon dioxide) purifies the water in the Aquarium Exhibits. Twelve of the fifty-two scrubbers will be replaced during the month of June as part of the ongoing program to improve the efficiency and effectiveness of the Aquarium's turf farm. The scrubbers have been in place since the Aquarium opened and the new scrubbers will improve water quality.

Continued from front page

WHAT'S HAPPENING TO DUGONGS?

WHAT IS BEING DONE ABOUT IT ?

To counteract the threats to dugong survival a program is being coordinated by the Great Barrier Reef Marine Park Authority with the Queensland Department of Environment, the Queensland Department of Primary Industries, Fisheries and Forestry and the Queensland Fisheries Management Authority, local government, indigenous people, commercial and recreational fishers, conservation groups and local communities. Besides monitoring dugongs, the program aims to develop and enforce policies relating to human activities affecting the survival of dugongs.

HOW CAN YOU HELP?

Please report any dugong deaths or accidents you witness to the Authority. A dugong information kit is also available. Please phone Monday to Friday for further information 500 809 .

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