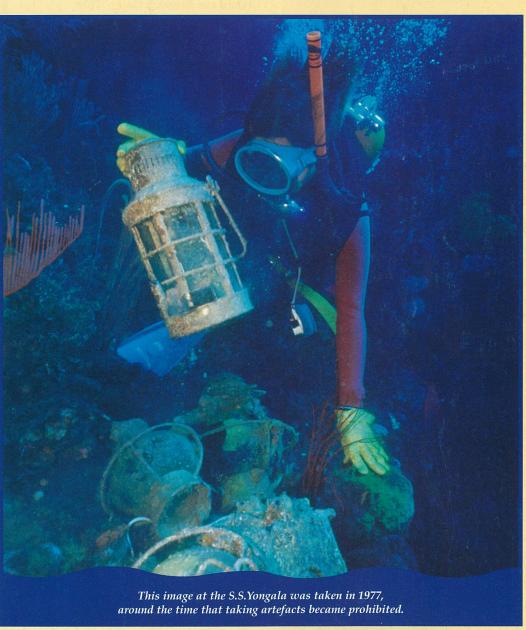
# AQUARIUM SUPPORTERS' MAGAZINE GREAT BARRIER REEF AQUARIUM





## BUILDING A BOAT THAT DOESN'T FLOAT

eep your eyes on the Predator Exhibit over the next two months as it is transformed into the resting place of the ill-fated cruise liner, the S.S. Yongala. In 1911 (the year prior to the sinking of the Titanic), the S.S. Yongala went down off the coast of Townsville. For many years it lay, lost at the bottom of the sea, until in a Navy mine-sweeper came across it in the early 1950s. However, its discovery was short lived, as incorrect bearings led subsequent explorations astray.

Continues over page

# OUT TO THE WILD, BLUE YONDER

t is that time of year when the weather cools, the sea turns from turbulent green to azure blue and the Aquarium curators are out in the field. A recent two-day trip to Keeper Reef resulted in approximately four hundred new fish for the Coral Reef Exhibit. Keeper Reef is about fifty nautical miles off the coast of Townsville and is one of the sites where the Aquarium has a permit to collect fish, corals and some other organisms. The Coral Reef Exhibit is restocked from time to time to keep up with the natural attrition that occurs in the reef community. Field trips also allow the opportunity to collect new and unusual animals that will add to the learning experience for Members, students and

Field trips generally occur from this time of year through the winter as the water temperatures cool and there is little threat of rain. This timing is also best because conditions in the Aquarium's Coral Reef Exhibit are most stable. It is during the summer when there are plenty of tropical lows playing havoc with the weather, that collecting comes to a halt and effort is invested in monitoring and maintaining the permanent residents of the Coral Reef Exhibit. It is better to introduce animals from the wild into a tank where the conditions are at their most stable to ensure the best chance of the animals' survival



## BUILDING A BOAT THAT DOESN'T FLOAT

Continued from cover

SCUBA diving was in its early days at this time, so when the wreck was finally found again, stories about what was actually down there were somewhat exaggerated. It seems that the first really valid interpretations came from the Queensland Underwater Research Group. They ventured down using a combination of SCUBA and hooker systems (breathing through a hose that runs to the surface). The early reports from divers dwell on the incredible marine life which had made the wreck their home.

Exhibit designer, Glenn Shield has talked to a few of the members of those early expeditions. One recounted how they recovered the safe and hoisted it to the surface, only to find it full of sludge. It was the safe which confirmed that this vessel was in fact the S.S. Yongala as no name was visible on the ship. The safe's serial number was sent to Chubb in England and the mystery was solved. A replica of the safe has been constructed using information from a 1906 Chubb safe catalogue. The ship too has been built from the original plans, obtained from the Townsville Maritime Museum. However, the entire vessel would be a little oversized for the Predator Exhibit, so it is the bow which will take the stage in the 17m long and 10m wide exhibit. Its so big that we have been building the wreck in a warehouse in Garbutt for the last few months.



Silicon rubber moulds and fibre glass have been used to create the detail of encrusted coral and algae on the ship's hull.

Those people fortunate enough to have dived the wreck of the S.S. Yongala will notice that we have built the vessel in its mirror image to ensure the best possible fit in the tank. We have also included the railings, most of which have since fallen off. Building the winch has been a challenge as there is little information to go by. At the time of writing this, the replica S.S. Yongala was a structure of Vinidex, 50mm PVC pipe. This forms the frame over which the coral encrusted hull will be constructed.

A special preview of this amazing work in progress is planned for Friday, May 15 at 6.00 p.m. at the warehouse. Please call 4750 0800 to register your attendance.

## WELCOME TO THE LATEST SPONSORS

he Davis Family Group was one of the Aquarium's Founding Sponsors and we are thrilled to have them renew their support. They specialise in cloth shade structures as well as metal awnings and carports. Their work includes shading at the Civic Theatre and keep your eye on Tobruk Pool! It will soon be a sun-safe place, thanks to The Davis Family Group.



As the only fully commercial digital production unit in Townsville, Digital Dimensions are in hot demand for the production of corporate, training and occupational health and safety videos. They have some excellent natural history material, tourism promotional videos and have produced publications and CD Roms all with the Digital Dimensions stamp of quality.



## CORAL CART IS OUT AND ABOUT IN 1998

#### Science Week

The Aquarium's latest sensation, the Coral Cart, will be out and about during National Science Week in May. Its first call will be the Cathedral School Science Expo on Wednesday night, 6 May. The Science Expo will host a number of interactive exhibits from the Australian Institute of Marine Science, the Queensland Museum and others, but perhaps the big star will be appearances from Dr Dean Hutton. For those who don't know, he is of ABC Science Show, Curiosity Show and now Foxtel fame.

After that, Coral Cart will be at the James Cook University Science and Engineering Expo, on Thursday 7 May. So much on during Science Week! Come in and be reminded of the enormous on going science experiment in the Aquarium's Coral Reef Exhibit.

#### Under Eights' Week

Barefoot in the Park (Friday, 22 May) is a great day for the little ones and Coral Cart and the whole Aquarium gang will be there. Members, ask for your Lucky badge.

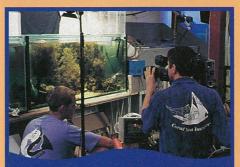


#### ON LOCATION

omewhere, hidden away in a secret location on the Aquarium premises, there are movie stars in the making. It started last year when newly spawned corals were in demand from film producers worldwide. To keep up, the Aquarium entered into an arrangement with local underwater and natural history film-makers Coral Sea Imagery, who have established a film facility on site.

Since then a string of noted natural history documentary makers, such as the BBC and Survival Films have been to Townsville, confident of obtaining some excellent footage. Currently, Coral Sea Imagery are amassing a range of small sequences for a program called "Wild and Weird",

produced by NHL/ Discovery Channel. Pre-production has already begun on another film, a first-ever comprehensive natural history of sea snakes entitled "Serpents of the Sea".



It's a waiting game! When the sargassum fish starts to eat, the cameras will roll.

#### AQUARIUM Interns



Caption: Yoshio, Julian and Cindy check out Masaharu's fish pathology project.

I f you were a university student looking for a place to get some real hands-on experience, where would you go? It seems for several people, that the Aquarium is the place. In response to constant requests for volunteer work (via the Aquarium's web site), an Intern Program has been developed. Interns work full time for a minimum period of three months and must be tertiary qualified.

So far the Aquarium has placed around eight interns from Great Britain, the United States, The Netherlands, Japan and Australia. Presently there are four interns assisting the Aquarium. Three are helping with the coral growth research projects, animal husbandry and fish diseases, and are all well qualified to do so: Julian Cocks (Australia), has an Applied Science Degree in fisheries from the Australian Maritime College, Yoshio Fukabori, has a Masters degree in biology from Ryukyu University in Okinawa, Japan; Masaharu Mizukami, with a Masters degree in fish pathology from Kochi University in Kochi, Japan. The fourth intern, Cindy Ammerlaam (Netherlands) is completing her degree in International Tourism Management and Consultancy at the Netherlands Institute of Tourism and Transport Studies. Cindy has undertaken a four month market research project aimed at improving our performance in the backpacker market.

Interns do not receive any financial remuneration for their work (their visa requirements preclude this) and are in Townsville for periods of between three and twelve months. Accommodation (which needs to be close or handy to good public transport) can be tricky for students who are new to the area, so if any Members can assist, we would be delighted to hear from you. Financial arrangements for board can be determined from that point.

## ◆ DAILY PROGRAM◆

Admission: \*Aduts \$14.80 \*Child \$6.50 \*Concession \$12.80 \*Family \$35.00 \*Inquire about group discounts and early passes

#### 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: 10.00 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: 11.00 am and 2.00 pm daily

Cost: included in Aquarium admission

#### TURTLE FEEDING

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

Time: 12.00 pm every day

Cost: included in Aquarium admission

#### **TOUCH POOL ENCOUNTER**

Make some amazing underwater discoveries at the Touch Pool. Join the interpreter for your close encounter with reef life.

Time: 4.00pm daily Included in Aquarium admission

## AUDIO VISUAL SHOW 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:* Every hour on the half hour from

9.30 am to 4.30 pm

Cost: included in Aquarium admission

#### SHARK FEEDING

It's alway 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 3.00 pm

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: Every Monday, Wednesday, Friday

and Saturday at 3.00 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  $3.00 \ pm - 4.00 \ pm$ 

Cost: included in Aquarium admission

## ALL ABOARD THE S.S. YONGALA

#### June School Holiday Program

What happened when the S.S. Yongala went down? Become a marine archaeologist and discover more about shipwrecks.

Ages: 5 -12

Date: 20 June - 5 July, everyday

Time: 10.30 a.m.-12.30 p.m.

Free with Aquarium admission or membership.



## ◆MEMBERS' PROGRAM◆

### MAY 1998 JULY 1998

PLEASE BOOK EARLY TO AVOID DISAPPOINTMENT WEEKDAYS  $4750\ 0800$  and WEEKENDS  $4750\ 0891$ .

#### MOTHERS DAY **B**REAKFAST

Pamper your Mum by treating her to breakfast at the Aquarium. Kick off the morning with a glass of champagne, feast on a yummy breakfast and enjoy time with the family!

Date: 10 May Time: 8.00 a.m. Cost:

Adults (above 14) \$17 Children (5 to 14) \$10

Children (2 to 4) \$5 *Family* (2+2)

Bookings essential by 7 May

#### UNDERWATER DREAMERS

Sleeping over at the Aquarium is really something amazing and the children love it. Games, craft activities, torchlight discovery tours and a delicious supper and breakfast. BYO sleeping bag, pillow and torch.

Book early for this very popular program. You have two dates to choose from.

Date: 15 or 22 May Time: 7.00 p.m. - 8.00 a.m.

Cost: Members Non-Members 1st child \$35 \$40 2nd child \$28 \$34 3rd child \$24

Age group: 6 - 12 years Maximum group 30 children Phone bookings essential and must be confirmed by payment.

#### MUST SEA MUST DO

Mark your diary now. South Passage Twilight Sail - 18 & 19 July; Fathers' Day Breakfast - 6 September; Behind the Scenes Tour; Home Aquarium Course; Halloween Sleepover and more.

#### S.S. YONGALA PREVIEW

Take a peak at the S.S. Yongala before it is installed in the Predator tank. The details of this fascinating project will be shared over Friday evening drinks at our Garbutt workshop. Numbers are restricted so book early. Priority bookings available for Business Sponsors, Patrons and Silver Members.

Date: May 15 Time: 6.00 p.m.

Where: 233 Ingham Road, Garbutt (near

KFC) Free for Members

Beverages on sale, refreshments provided. Phone bookings essential by May 12.

#### CORAL REEF **BIOLOGY COURSE**

A two-day course 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. Suitable for aged 15 years and over.

Date: 23 & 24 May inclusive Time: 1.00 p.m.- 5.00 p.m. Saturday 9.00 a.m. - 1.00 p.m. Sunday Cost: Members: \$65 Non-members: \$70 Bookings close 20 May

#### SAIL MAGNETIC ISLAND GIRL

#### A 40 foot Polynesian catamaran

Experience a fantastic day of sailing, snorkelling and soaking up the balmy weather in the bays of Magnetic Island. Marine biologists and sailing instructors will make sure your day is as active, educational or relaxed as you want it to be. A full day with lunch provided.



Date: May 24 or May 31 Cost: \$40 per person or \$155 for family of four Phone: 4724 0014 and ask for your special Aquarium Members' price. Bookings essential and close 7 days prior to sail.

#### WILD CAT

#### An ultra-fast sea adventure

Strap yourself in for the wildest ride of your life! Experience an exhilarating scenic tour of Magnetic Island as Wild Cat flies across the water at speeds in excess of 70km/h

Date: 20 or 27 June

Time: 9am departure 10.30 return with 15 minute stopover on the Island

Where: Island Adventure Ferries, No.1 *The Strand (just behind the Aquarium)* Cost: \$27pp, \$20 age 10-15 (must be over

10 years of age)

Phone: 4724 0555 and ask for your special Aquarium Members' price. Bookings essential and close 7 days prior

#### AUSTRALIAN FESTIVAL OF CHAMBER MUSIC PRESENTS:

Lunchtime mini concerts at the Great Barrier Reef Aquarium.

This is free for Members to enjoy while visiting your favourite place at the Aquarium.

Time: 12.15 p.m. - 12.45 p.m. 10, 11, 12, 17, 18 & 19 No bookings required



#### MANAGEMENT MATTERS IN YOUR MARINE PARK

#### The Effect of Floods on the Reef

In the last issue of Coralines, we let you know how well the Aquarium's Coral Reef Exhibit fared during the high rainfall experienced during summer; but how about the Great Barrier Reef itself? What happens when so much freshwater is dumped on the ocean and when so much muddy water runs out from along the coast? One real concern is for the health of the corals and you may have read about coral bleaching in the newspapers. Coral bleaching occurs as coral tissue expels zooxanthellae, a type of algae that resides in the structure of the coral and is essential for the coral's survival.

It is believed that climatic events such as a rise in the water temperature combined with prolonged exposure to low salinity waters, can trigger coral bleaching. Corals do best when the water is clean and clear and the temperatures do not exceed 27 degrees C. Temperature monitoring in parts of the inshore areas in the southern Great Barrier Reef in recent months show rises in water temperature levels. Where heavy terrestrial flood events have occurred, such as in the Townsville region during January, coral bleaching on many inshore fringing reefs is particularly acute. Corals normally recover from bleaching, unless high ocean temperatures or low salinity situations persist for too long.

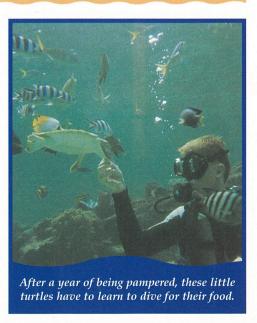


Flood plumes have been known to extend as far as the outer reef.

Scientists say that while summertime bleaching of corals is a regular event, the extent of the present bleaching could be the biggest since 1982. Recent reports of coral bleaching along inshore waters of the Great Barrier Reef has prompted a call from GBRMPA for public assistance in monitoring the event. Any visitors to the Reef who see bleached coral areas are asked to report the sightings to GBRMPA so that a more comprehensive understanding of the magnitude of the phenomenon can be realised.

#### TURTLE TRAINING

ave you been wondering what happens to our baby turtles once they are over a year old? They are sent out to the big wide ocean; but seeing they have lived a pampered life for a year, being spoon fed and protected from danger, we have to train them on the latest foodcapture techniques. If any animal is hungry enough, it will find its food, but the first thing these turtles have to learn is how to dive. They have only experienced the shallow water of the turtle pool, so it is into the Coral Reef Exhibit for some dive training with our aquarists. After about a week they have the hang of it and start to feast on a whole lot of things that we wish they wouldn't, so it is time to release them into the wild.



# NEW AQUARIUM BENEFACTORS

elcome back to Pure
Pleasure Cruises,
who are offering a 15%
discount on their fantastic trip to
Kelso Reef, and to Omnimax
Theatre, where you will receive a
20% discount off any film, on
presentation of your membership

All Aquarium benefactors are committed to providing the highest quality service, but if you happen to experience any problems when using your Membership card, please call us so we can attend to the situation. Suggestions for other benefactors? Please call us.















## Congression 1037-0684

Coralines is published by the Great Barrier Reef
Aquarium. The views expressed in this magazine are not
necessarily those of the Great Barrier Reef Aquarium and
the Great Barrier Reef Marine Park Authority.
The Aquarium is a self funding section of the Great
Barrier Reef Marine Park Authority.

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