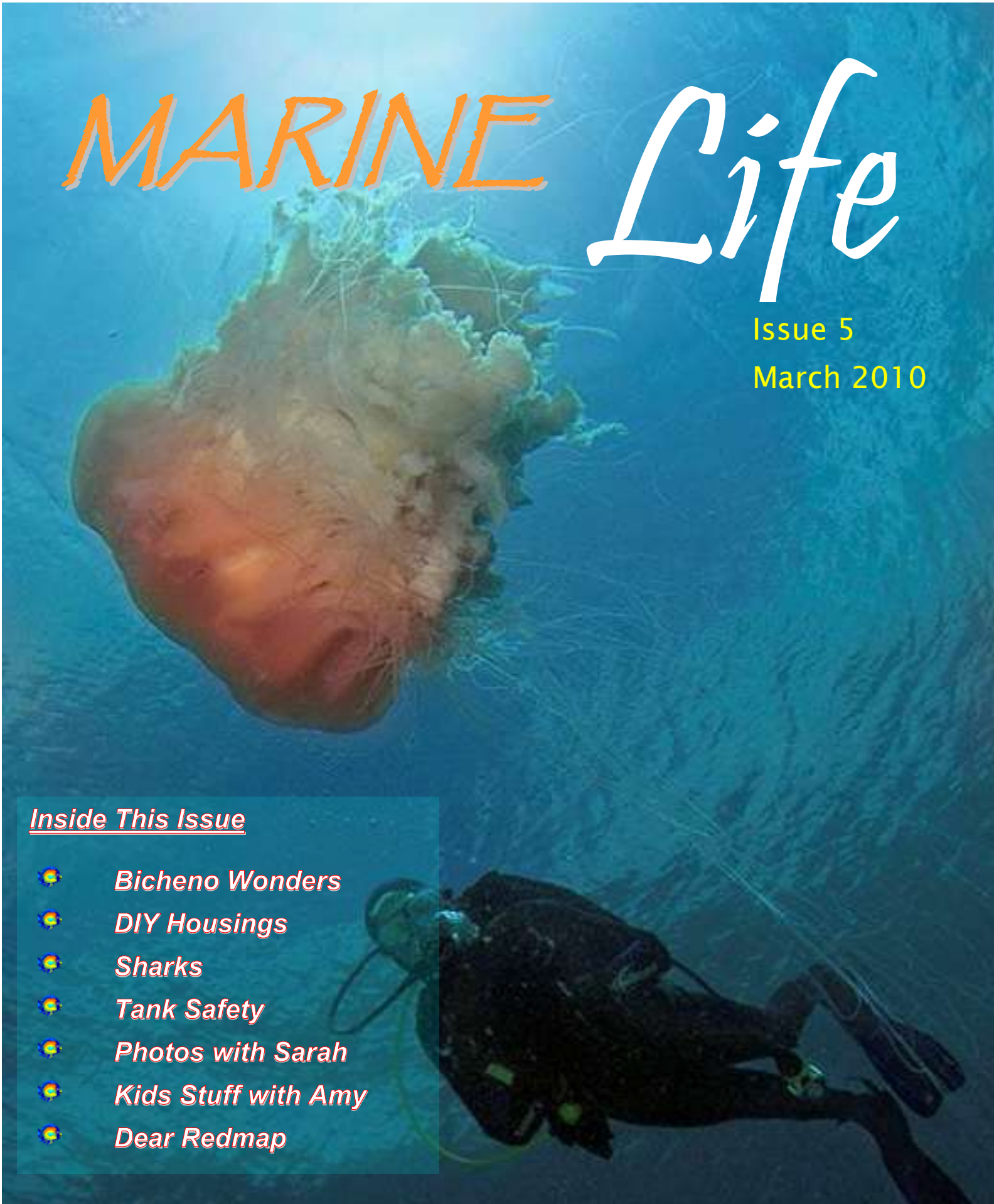
MARINE Life

Issue 5
March 2010



Inside This Issue

An eco-friendly community-based magazine for the Tasmanian marine and marine life enthusiast

Our goal

To educate, inform, have fun and share our enjoyment of the marine world with like-minded people.

Our Team

Mike Jacques

Editor in chief and author of "Dive Tasmania". TSDC President. A census of opinion at Bellerive Primary came back "shabby" and "weird". Out of the mouths of babes.

The Prince of Sharks

Our man in the North. Member of Ocean Divers Plus. Loves putting his shoulder into a heavy load, or is it putting his shoulder out.

Guest Cub Reporters

Wing Commander John Smith RAAF (ret), likes Sea Dragons, photography and home brew. Now often gets to altitudes of minus 10 metres.

Emma Flukes

TUDC Diving Officer, UniTas honours student in marine science. Struggling away with the great questions of Honours Studies, such as "Why am I doing this?" and "What can I do now other than studying".

Phil White

Our man in the North West. Leven Scuba Club member. At least fish find him irresistible.

Amy Dadson, 9 1/3rd, goes to Bellerive Primary School and likes David Attenborough DVDs, science, maths and reading

Disclaimer: The views expressed in this publication are not necessarily the views of the editorial staff or associates of this publication. We make no promise that any of this will make sense.

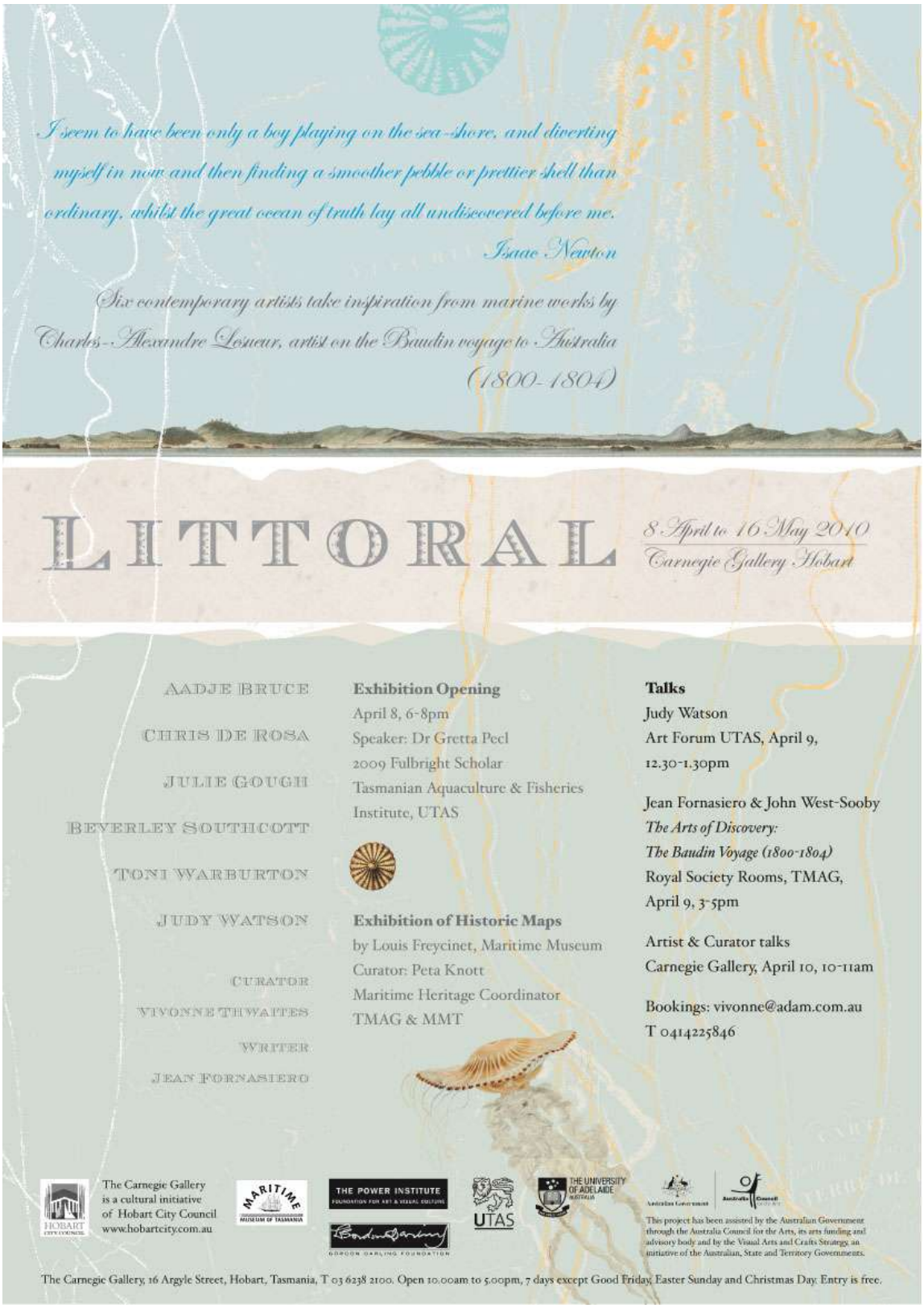
Marine LIFE

Underwater this issue

The big stories…

Art Exhibition

Gretta has given me the full 'skinny'/ 'gen' /info on an excellent exhibition that seems to cover the history of exploration with a cool creative twist.



Fishing for the Future

No Mako Fishing Ban

The Australian Government has responded to three shark species being listed as a migratory species under the Environment Protection and Biodiversity Conservation Act (EPBC Act). A federal government Joint Standing Committee on Treaties is currently investigating the proposed listing of Mako and Porbeagle sharks which will result in the ban on taking these shark species.

National fishing organisations worked hard to get Minister Garrett to consider an exemption for the recreational sector or at least a 6-12 month temporary halt to the implications of the international listing. The Federal Coalition has also sought to stop the Federal Environment Minister's proposal to ban recreational fishing of Mako and Porbeagle sharks. Senator Colbeck noted that extreme green groups get seats at key marine meeting; fishing industry misses out. Senator Colbeck has called on the federal government to immediately announce the postponement of his ban and begin a genuine consultation process prior to any decision being made.

Minister Garrett's media release indicates that catch and release for Mako's is acceptable, and noted that Mako stocks were not under pressure in Australian waters and the effect of the international listing has been an unintended consequence that was unknown at the time of the listing. The federal government says it did not know that the 3 shark species would be banned for the recreational sector when they were listed. This is a very hot national and there are considerable efforts being directed at Minister Garrett to reverse the implications of the listing. The EPBC Act is is currently under review. Recommendation 17 says that the government should allow the take of the 3 shark species listed on the international listing, subject to management arrangements and that the take would not be detrimental to the survival of the species. The Government then bowed to pressure and will not implement the ban.

The ban only applies to commonwealth waters, i.e. beyond state waters (3 nautical miles) and out to Australia's territorial waters (220 nautical miles) and is expected to come into effect from 29th January 2010.

The Wonders of Fishwatch

After seeing a respected member of the business community and well-known yachtsperson recently pull in a bucket full of undersized fish on a cruising day out, perhaps I have to retract my earlier optimism about the fishing regs message starting to sink in. I had a recent conversation with a fellow in a blue-collar workplace of some size, where cray selling for cash in a regular activity. The same source also mentioned how a few zealous types catch their 5 crays in the river, dump them at home then go and get another 5 in the Channel on the same day.

The reasons for this avarice seem to be related more to the thrill of beating the law and the thrill of the chase, rather than a real need for a lot of crays, or an expectation that they will make a fortune out of it. They might make $50 here and there, but run the risk of boat and gear confiscation on top of jail and fines. Like a lot of crayfishing it's a story of a lot of expensive effort for a small return.

If you have a similar story I would suggest that there is someone even more interested than us. If you are aware of illegal fishing activity ring…**0427 655 557**

Recent Recreational Fishing Survey Results

(collated by Ian Cooksie , Aqua Scuba)

TAFI have just released a report on the 2008-09 recreational rock lobster and abalone season. This is a summary of the results:
• 21 000 recreational crayfish licenses and 13 000 abalone licenses were issued for the period of 1 November 2008 to 31 August 2009.
• During this time 105 500 crayfish were caught, 61% by cray pots and 33% by diving.
• 70% of these fish were caught between November and January.
• 58% were caught on the east coast, 24% on the north coast and 19% on the west coast.
• The crayfish caught by recreational fishers made up 6% of the total allowable catch (recreational and commercial catches combined).
• During the same time, 81 000 abalone were caught of which 60% came from the east coast. This total made up 1.5% of the total allowable catch.

During the last 10 years there has been an increase in the number of licenses issued but not an increase in the total number of fish caught by recreational fishers.
A review of the rock lobster fishery is underway and public meetings will be commencing in April. The full report and information on the rules review are available from TAFI, www.tafi.org.au

Tank Safety

by Ian Cooksie , Aqua Scuba

The issue of the "old aluminium cylinders" continues. SAI Global, the regulatory authority for scuba cylinder design, manufacture and testing, has issued a statement concerning the filling and testing of these cylinders. This is the only official statement concerning these cylinders since the Queensland Work Place Cover Safety Notice issued in September. The statement clearly states that these cylinders are still approved for use providing that they pass the appropriate test. "Until there is a regulatory authority decision specifically prohibiting the testing and filling of these cylinders they may continue in service, providing they pass all of the inspection and testing requirements of AS2030.5 and AS2337.1 plus any additional requirements of the manufacturer such as Eddy current tests.

Over the last few months we have encountered an increasing number of scuba cylinders without burst disks. A burst disk is a safety device installed into the valve that is designed to rupture before the cylinder pressure exceeds its safe and tested limits. Burst disks will occasionally blow when full cylinders are left inside hot cars. As the heat increases the pressure inside the cylinder rises to dangerous levels. If the burst disk does not blow, releasing the cylinder contents in a quick but controlled manner, the cylinder could explode.

The problems we have encountered have been old cylinders without burst disks, 2 burst disks installed so that the cylinder can be given "a good fill", the burst disk removed and a solid plug engineered and put in its place, incorrect burst disks installed and brand new cylinders being sold without burst disks. Burst disks are required to be fitted on cylinder valves in Australia for safety reasons and if your cylinder has the incorrect one installed, your cylinder could be failed.

Trials of Boating (Yes, it Happens to all of us at some time)

KAYAKERS RESCUED OFF WEST COAST

Source: Tasmania Police Wednesday, January 13, 2010

At 11.00 p.m. on Tuesday 12 January 2010, two Queensland men activated two EPIRBS when they got into difficulties kayaking on the West Coast near Granville Harbour. AMSA initiated a search including a Dornier aircraft from Victoria, the Westpac Police Rescue Helicopter, local police, SES and local fisherman from Granville Harbour.

About 2.30 a.m. on Wednesday 13 January 2010, the Dornier crew saw a light on the water about 1.5 km South of Granville Harbour. The Westpac Police Rescue Helicopter confirmed the two men were still in their sea kayaks at 4.00 a.m.

A fishing vessel assisted with the rescue taking the men onboard at 5.30 a.m. One man is believed to be mildly hypothermic but otherwise well, both are being conveyed to Strahan.

The men are believed to be brothers aged in their thirties from Queensland and were attempting a circumnavigation of Tasmania in sea kayaks.

Police will speak to the men on their arrival at Strahan at 4.00 p.m. today.

CHINESE JIBE

Someone sent me in a picture of their boss putting his yacht over in what is called a "Chinese Jibe", assumedly because its makes one live in 'interesting times'.
While not as enjoyable as putting in a photo of your boss having a bad day, I'm still waiting on photos of someone who was asked to launch a dinghy and was told "not to put the car too much in the water". This was interpreted as meaning he was to launch the boat by driving the car down the ramp head first, with obvious results.

Funding News

Tasmanian Community Fund Grants

The Tasmanian Community Fund makes grants to community organisations that make a difference by improving social, environmental and economic outcomes for the Tasmanian Community. The next grant round opens on 13 February and applications must be submitted by 24 March 2010. Guidelines are now available from www.tascomfund.org/applications.html

NRM North's Coastal Community Grants

Grants of up to $5000 are available to assist groups undertaking on-ground works within coastal or estuarine areas in northern Tasmania. An information kit including grant application forms and guidelines is available at www.nrmnorth.org.au Kits may also be requested by contacting NRM North administration on 03 6333 7777 or by email to admin@nrmnorth.org.au Applications close 12th March, 2010**.**

Climate Change Information

Wedges Report

The Tasmanian Government has released a major climate change report analysing the opportunities for greenhouse gas emission reductions across the Tasmanian economy. The key findings of the report are available the link below.
www.earnyourstars.tas.gov.au

Preparing Biodiversity for Climate Change

A report assessing the vulnerability of Australia's biodiversity to climate change has recently been released and is available for download from www.climatechange.gov.au

Climate Change Report Card

A climate change impacts and adaptation report card for Australia 2009 has been released. The report card summarises knowledge on climate change impacts, identifies knowledge gaps and addresses key adaptation issues. The report is available at www.oceanclimatechange.org.au

Coastal Erosion Mapping Tool

Australia's first National Coastal Landform and Stability Mapping tool has been launched. The tool maps coastal landform type for the entire Australian coastline and provides the ability to identify areas vulnerable to erosion under a changing climate. It can be accessed at www.ozcoasts.org.au

Climate Change Impacts on Derwent Tidal Wetlands and Saltmarshes

Tidal wetlands and saltmarshes occupy 3.6 square kilometres of the low lying coastal areas around the Derwent estuary. These distinctive coastal vegetation communities are dominated by succulent shrubs (samphire), grasses, sedges, rushes or herbs. Saltmarshes occur on saline flats and estuarine areas fringing low wave energy coasts, whilst tidal wetlands typically occur in the upper estuary where surface waters are brackish. These areas provide important habitat for coastal plants, water birds, fish (spawning and nursery areas), and invertebrates. Wetlands and saltmarshes also act as natural sponges, absorbing and stilling flood waters and filtering out sediments, nutrients and other pollutants, and can also buffer the coastline from wave erosion. In the Derwent estuary some wetlands and saltmarshes are currently threatened by foreshore development, in-compatible land-use, and sea level rise. The Derwent Estuary Program initiated a study to predict the future extent and migration of tidal wetlands and saltmarshes in the Derwent estuary by 2100 in response to sea level rise. This study was completed by researchers at the University of Tasmania, with funding support from NRM South. The study first mapped the current extent and distribution of tidal wetlands and saltmarshes from aerial photography and satellite images, and then mapped the future extent

of this vegetation based on a 110 cm sea level rise (this is the International Panel for Climate Change (IPCC) high end sea level rise
projection for 2100). The good news is that in many areas of the Derwent estuary the tidal wetlands and saltmarshes should be able to migrate to new areas, provided that their path is not blocked by seawalls, landfill or other barriers. It was recommended in the study that suitable low-lying areas be assessed and noted as potential wetland and saltmarsh conservation areas in consultation with public and private land owners. For further details, see the full report available on the DEP website.

NRM and Landcare Information and Events

2010 National Landcare Forum

Landcare celebrates 20 years of achievements and looks at future challenges. Are you are interested in protecting the environment and creating sustainable landscapes, lifestyles and livelihoods for the 21st century? The Australian Government invites community groups, farmers, Indigenous land managers, researchers and interested individuals to attend the National Landcare Forum which is being held at the Allan Scott Park, Morphettville from 22nd - 25th March 2010. Over 400 delegates are expected to attend. The National Landcare Forum will include workshops, presentations, demonstrations, a gala forum dinner, and an exhibition including displays from around Australia. Delegates will have the opportunity to learn about the latest research developments in Natural Resource Management and sustainable agriculture, develop new networks and new skills; celebrate 20 years of achievements and recognises the significant contribution the community has made over the last 20 years. Sessions will cover current issues including climate change, carbon sequestration, volunteering, succession planning and food security. On 25 March delegates can visit a range of Landcare projects and restoration sites in the Barossa Valley, the Lower Lakes and urban areas.
If your organisation is interested in an exhibition booth or display space please see the Forum Website. Exhibition fees cover one full delegate registration per booth. Smaller groups can site share to reduce costs.
To register or find out more please go to:
http://www.nationallandcareforum.com.au

NRM Regional Coastal Forum

Understanding coastal changes: causes and implications **-** Tuesday 23 March from 9.30am – 1.00pm at the Ulverstone Civic Theatre (lunch included). Secure your place by calling Leanne on 6431 6285. Registrations are essential for catering purposes and will close on 19 March. All welcome to this free event, organised by Cradle Coast Natural Resource Management and funded by the Australian Government's Caring for Our Country Program.

Pittwater Orielton Lagoon Information Session

Come along and find out about getting involved with looking after Pitwater Orielton Lagoon
Speakers will include Eirc Woehler (Birds Tasmania), and Vishnu Prahalad (UTAS).
Thursday 4th March, 6pm – 8pm
Sorell Memorial Hall
Contact Andry Sculthorpe for more information, ph. 6269 0000,
Andry.Sculthorpe@sorell.tas.gov.au

Clean up Australia

2010 marks the 20th anniversary of Clean-up Australia Day (CUAD) and the Derwent Estuary Program (DEP) is coordinating a major regional Derwent litter campaign with the aim of collecting over 20 tonnes of rubbish! This campaign is supported by the DEP's council, state govern-ment and industry partners, as well as the EPA Division, the Aus-tralian Government's Caring for Our Country program and Veolia Environmental Services. During CUAD 2009, 45 community groups, schools and businesses collected over 4 tonnes of litter from the Derwent's foreshore. In 2010, we hope to involve 60 groups in the Derwent Clean-up Cam-paign, collect over 20 tonnes of rubbish and target a number of lit-ter hotpots along the foreshore. Links

between urban stormwater and foreshore litter will also be highlighted given that stormwater is the primary source of litter to the Derwent. If you would like to join in please **register** your group and site on the Clean Up Australia Day website:
www.cleanupaustraliaday.org.au
Please note that Business Clean-up Day is on Tuesday 2 March, Schools Clean-up Day is on Friday 5 March and Community Clean-up Day is on Sunday 7 March.
If you would like to nominate a litter hotspot along the Derwent foreshore, contact John Chrispijn on 6233 0477.

Arm End Reserve gets some much needed attention

Oliver Strutt,
Coastcare Facilitator

The Arm End Reserve at Opossum Bay is one of the most visible landmarks in the Hobart area and it is a popular destination for both locals and visitors. The reserve is suffering though, from invasion of weeds including serrated tussock, boneseed, african boxthorn, cape wattle and others, high populations of feral cats and rabbits, declining native vegetation, and generally inadequate management.
The South Arm Coastcare group has secured funding through the Caring for our Country Community Action Grants to develop a management plan for the reserve and begin undertaking work, including weed control and revegetation with locally occurring species.
The project will commence with a Family Fun Day including a sausage sizzle, treasure hunt, information display and walk and talk around the reserve to facilitate community input into the development of the management plan. The event will be on Sunday the 14th of March from 10am to 1pm.

NRM South Forum

note that the date of the forum has been changed to March 9th, 2009.

NRM South, in partnership with the Southern Coastcare Association of Tasmania, would like to invite you to join us to find out more about natural processes in the coastal environment and discuss the resulting management issues and approaches.

This forum is an opportunity to:

- update your knowledge on coastal landform changes resulting from sea-level rise
- hear about the SMARTLINE mapping tool and the TASMARC monitoring program
- ask questions of technical experts and land mangers during a panel discussion

Guest speakers and panel members to include Chris Sharples (coastal geomorphologist), Chris Rees (Coastal & Marine Branch, DPIPWE), Phil Watson (Clarence City Council), Nick Bowden (University of Tasmania).

Art and Education

Each year, the Marine Education Society of Australasia (MESA) runs Seaweek to promote educational issues of relevance to the marine environment.

In 2010, the theme is 'Oceans of Life – ours to explore and conserve' in recognition of 2010 as the International Year of Biodiversity.

Why Oceans of Life as the Seaweek theme?

Australia is a marine nation. We have one of the largest ocean territories in the world, and it drives our climate and weather, generates employment, provides food and resources, and offers lifestyle and recreational opportunities. (Source:CSIRO)

Australia's oceans also support rich biodiversity which we aim to explore in Seaweek 2010.

Seaweek in 2010 can:

- Inspire and inform you about the significance and value of our marine and coastal environment.
- Initiate interest and actions for our marine and coastal environments.
- Introduce you to activities and events facilitated in some states, through our State Representatives.
- Provide you with educational resources available on the MESA website for your classroom based activities.
- Involve your school and community participation in marine studies and exploration.

Oceans Marine Art and Issues Primary School Art Challenge

There are separate competitions for K-2, Years 3 & 4 and Years 5 & 6. The tasks include hand drawn sketches, paintings or Digital Artworks. The winner and runner up in each age category will receive a certificate, book and art material prize.

2010 Seaweek Banner and Ecard Photography Competition

MESA invites primary and secondary students to create art work with clear messages about our Marine environment. The theme of the work should tie in with the 2010 MESA Seaweek theme: "Oceans of Life; Oceans to explore, ours to restore"

There are two categories for this competition. Entrants can submit an original image for the Ecard category or draw, paint, glue, splash or sketch a full sized banner for the banner category.

NEW climate change educational resources!

As part of its Great Barrier Reef Climate Change Action Plan 2007-2012, the Great Barrier Reef Marine Park Authority has developed a suite of educational resources to help educators teach about the complex impacts of climate change on coral reefs.

http://www.mesa.edu.au/seaweek2010/default.asp

Critter Files

Common stargazer (*Kathestoma leave)*

Habitat: sand, mud

Depth range: 0-60 m

Size: up to 75 cm

Diet: fish, crabs

The stargazer is a bizarre-looking fish that appears to have hit every branch in its fall from the ugly tree. With a flattened head that allows it to burrow into the sand with only the eyes and part of the mouth visible, it chases anything including divers and has been known to swallow fish the size of its own body. This fish can be recognised by its lack of scales and all-round hideous appearance. I guess even nature makes mistakes sometimes.

I'm felt this delightful creature deserved a full photo montage... I'm sure you can see why - Emma

Photos © Emma Flukes

by Mike Jacques, Photos John Smith

Tasmania is full of contradictions. In the Western half it's mountainous and wet. Rainfall exceeds 2 metres per annum in some places and you can die of hypothermia half an hour from your car when the Antarctic blizzards roar up from the South.

In the Midlands it's an anachronistic scene of sleepy English hamlets and sheep country, the quintessentially Australian rural landscape of whitened dead trees and flies.

In the East the dry sheep country has given way to rolling hills that fall starkly over rocky escarpments and bubble quietly into sandy bays. The mountains have mostly blunted the violence of the Western winds and the East Coast is relatively dry and quiet. It's a place to grab a pencil and walk away from the tourists roads to draw or doodle as the breeze brushes and whispers through the coastal sheoaks and Oyster Bay Pines. Not too hard still to find a spot where the sand goes on forever, but there aren't too many people around.

In some places, a millenia of geological catastrophes have ripped granite from the darkened underworld where it formed. It has been released in an explosion of orange, pink, red and grey along the foreshore. This unyieldingly hard and crystalline surface weathers slowly. The eroded

foreshore rocks are gently sanded away, leaving smooth and massive monoliths as a barrier to the brisk Summer storms. The jet white quartz crystals that are released from the rock then wash back as blindingly white sand. The reflection of the sun from this white sandy bottom gives the water a mesmerising deep azure colour. This unique landscape has ensured that the granite coastlines of Freycinet Peninsula and Bicheno are considered among the most beautiful places on the planet.

When you enter Bicheno these days the sheoaks have often made way for foreshore holiday flats, but the landscape still isn't so tamed. The tough dryness of the landscape has constrained the size of the town. Some of the greasy old fish and chip shops built here in the 1970s have given way to high quality cafes and restaurants, but this is still a small fishing village, hemmed in on all sides by unyielding rocky escarpments. Fishing boats still ride out the swell in the precarious shelter of Waub's Bay as they have for a hundred years.

Its residents are a mix of beachcombing semi-retirees, eccentric drifters and leathery old fishermen. To be "local" here your grandfather probably has to be from Bicheno, but they are also accepting of the many 'blow-ins' whose business ideas and retirement funds have made this one of the more prosperous rural areas in Tasmania. The local mayor is a motorcycle riding French immigrant with a handlebar moustache, who use to be a movie extra before deciding to open a business in Bicheno.

I go to meet John, a former Wing Commander in the Air Force who travelled Australia as a "grey nomad" before falling in love with Bicheno and deciding to stay put. A big day out for John is to go for a dive and spot some seadragons, and that's how life should be. He is a keen underwater photographer but way too modest to admit to any skill. He does have a keen curiosity and an eye for a great shot, so its hard to see how he could be considered anything but a gifted photographer.

John has a second-hand Zodiac inflatable dinghy that was once owned by the Antarctic Division. We launch it in shallow "Gulch" created by the shelter of Governor Island and motor slowly past a rancorous group of birds enjoying the sheltered nesting sites offered by the island. These nesting sites can't be accessed by the rats, cats and dogs that would otherwise cull their numbers. Its mostly Crested Terns here, but there are also plenty of Silver Gulls and Oyster Catchers.

Governor Island is part of a small but important marine park that provides a number of excellent dive sites. When this park was first proposed there was strident opposition from fishermen. Predictions of a disastrous end to the fishermen's freedom of the high seas never came to pass. Instead the island encouraged a boom in dive tourism. Today it hard to find anyone who things the marine park wasn't a good idea. The current park is encouraging a return to the normal pre-overfishing range of sizes and species diversity that would have existed in earlier times, however it's a bit too small. You can trace the park boundary from the line of cray pots that ring the park, and animals roaming out of the protected area are quickly fished down again. As a result, marine animal populations are suffering to a degree due to these "boundary fishing effects". While the park is popular it is yet to be seen if an extension to its size would be. Fear of change is yet again likely to cause anger and hesitation.

We pass by a glass bottomed boat full of tourists gaping in awe at the seaweed and fishlife seen darting around the shallow fringes of the island. Other family groups are also visiting the small local aquarium that is open whenever the local owner's mood allows. We know its great family fun, but we also know there is even more to see when you really go deeper into the whole marine experience.

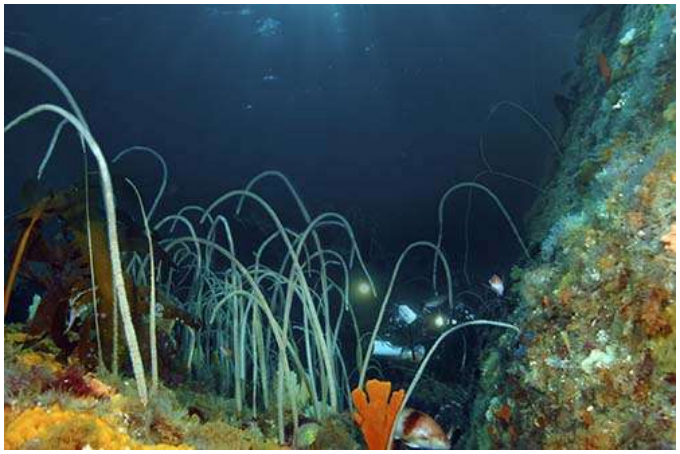
Governor Island, particularly on its North Eastern tip is a maze of granite spires and crevices. The local dive centre visits nearly every nook and cranny, logging up to 30 different dive options in this relatively small area. The big attraction here is the deep reef habitat. Nowhere that we know of has the variety of colourful invertebrates of this part of Governor Island.

In depths past 15 metres the bright sunlight fades out and seaweeds that need to photosynthesise can no longer thrive. Now it is the turn of a rich array of animals to take over the bottom. We say animals, but they are mostly rooted to the bottom and really look not much different from plants. A lot of these animals haven't changes much since the age of the dinosaurs and are among the simplest animals on the planet. They often overcome the limits of their simple cellular design by banding together and specialising. Some of the individual invertebrate animals (or zooids) that make up an animal like a bryzoan will take responsibility for forming supporting structures, others will defend the colony with poisonous excretions, or give support to the others by feeding zooids that are being damaged by an invading neighbour. They are a bit like underwater ant colonies, but as a result of their plant-like appearance their common name is Sea Moss. These animals in prehistoric times were as important as corals and formed their own massive reefs. These days they are less prominent in these depths as some other 'newcomers' have evolved further and increased the competition for space.

Space is the number one commodity that every deep reef animal fights for very bitterly, but so slowly that we hardly notice. It'll try to mercilessly eat, poison or overgrow any neighbouring animal or colony and evolution has given all deep reef animals a variety of poisons and defensive mechanisms to wage this total and constant war. This competition has also probably given impetus to the further evolution of more sophisticated animals.

One of the more recently developed deep reef invertebrate animals, the tunicate or sea squirt, has even developed a basic spinal cord and nervous system. Then evolution simmered away for a few million years more, and from this humble sea squirt its ancestors eventually crawled out of the water created the vertebrate animals like humans. A sea squirt is classified in a position closer to a human than it is to other deep reef animals like sponges.

The first thing a diver notices is not the structure of all these deep reef animals, but the riot of colour. These bright colours are a warning to others that they are bad to eat, so its best to stay away. To handle such an abundance of poisonous food, their predators have had to slowly acquire immunity to these colourful toxins. They have taken this one step further and used the poisons throughout their bodies to camouflage their skin, or frighten off predators. Hence something as disgusting sounding as a sea slug, can dress itself up to be one of the world's most beautiful creatures.



Perhaps the most remarkable dive in the area is the Hairy Wall. We haven't seen or heard of any other place in the world that has so many sea whips in one spot. Each sea whip is a colony of small anemone-like polyps closely related to coral. They club together and create a common spine-like support so that they can rise above the reef and take advantage of the rich nutrients passing by in the current.

A free-loader on these sea whips is the Basket Star. It also needs to get up high to feed on nutrient particles, but instead of evolving its own elongated stem it shinnies up the nearest sea whip or sea fan to save on a few million years of evolution. In the daytime they curl around the sea whip in an unremarkable small cluster the size of your fist, but after dusk they extend a vast web of feeding tentacles a metre across. Hard to think that such a small animal can spread itself out so far.

Another danger to the deep reef invertebrates is the ferocious sea spider. This spider is one of the world's most venomous. It also has some of the smallest fangs, making it a deadly threat to a bryzoan zoid, but no risk to anything bigger like a diver. These spiders for a long time weren't really thought of as true spiders, in fact scientists couldn't really decide how to classify them. When some biologists were asked to pick the one animal that seemed the most alien to earth, they picked the sea spider.

These deep reef dives are beautiful but short. Towards the end we are trying to squeeze off the last few shots, while looking anxiously at the contents gauge as it slowly sags towards the point where we must return to the surface.

[Our Study of the Wonders of Bicheno concludes next Month]

Redmap News

Win a $50 voucher from Mures Lower Deck!!!

Hi Redmappers,

All you have to do to go into the draw for this monthly prize is register for Redmap using the prompt on the top right hand side of the website. Registering is super-easy and it means that you'll receive our newsletter - we won't send this out more than quarterly so you won't get bombarded with lots of emails!!

Serious Kids Stuff

By AMY

Fun Facts

Amy 9 1/3 from Bellerive Primary School has heard that there are little animals that swim up fish's butts to suck their blood.

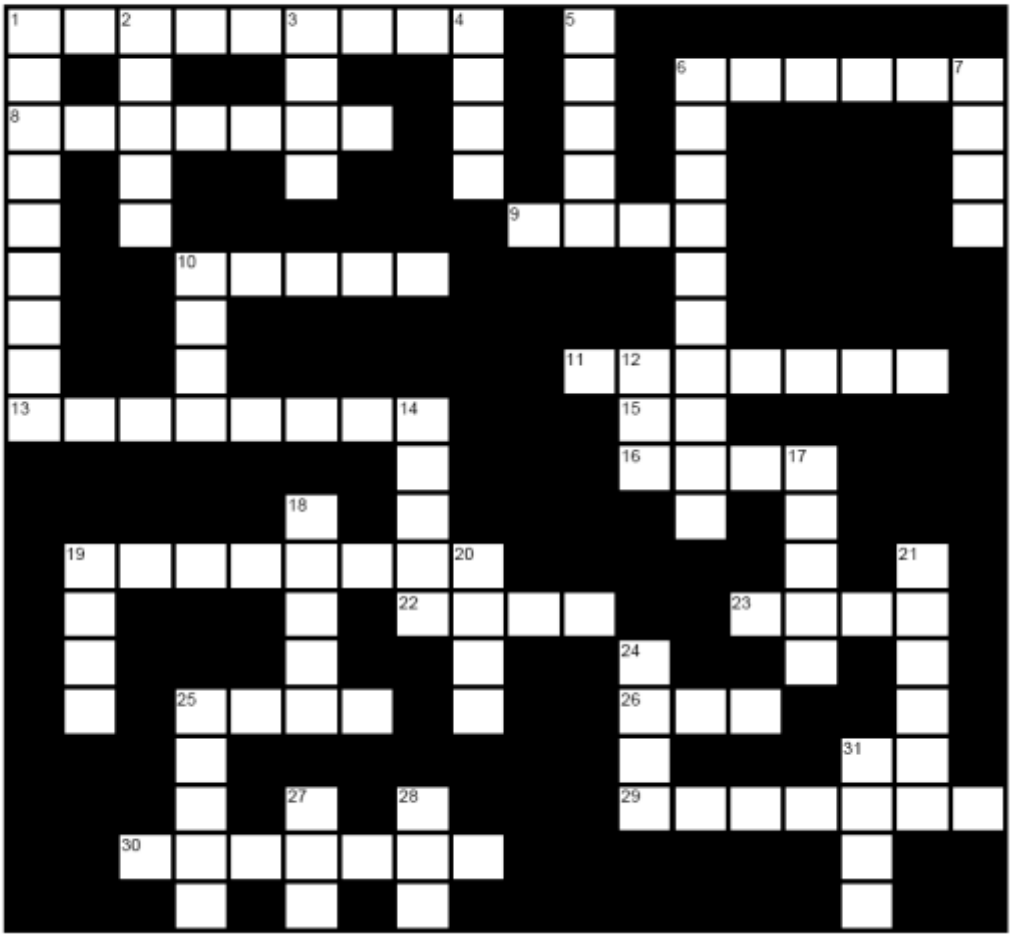
Answer: Yes that is true. There are species of sea lice that suck the blood of fish by attaching themselves in any handy spot, including openings like …errrr…the butt.

Amy: I also heard that turtles can breathe through their butt.

Answer: You have been listening to too much Bart Simpson. Animals like amphibians often breathe through their skin. I suppose some air can get through that way too.

Here is a turtle picture drawn by Amy. Bellerive School arranged for an Aboriginal artist to come to the school and help teach the kids about Aboriginal Art.

Marine and Coastal Crossword ★ ★



ACROSS

1. Creatures that glue themselves to rocks, boats or even whales are called _ _ _ _ _ _ _ _ _

6. A marine reptile that has four legs and scaly skin

8. Sea creatures covered with spines _ _ _ _ _ _ _

9. Often after storms you can find many _ _ _ _ bottles washed up on the shore

10. _ _ _ _ _ is a very important food source for many whales

11. Animals that are different from each other and don't mate are called different _ _ _ _ _ _ _

13. Huge and like velvety slugs, _ _ _ _ _ _ _ _ snails can be found in the shallow water

15. Chitons are molluscs that look a bit like slaters. Usually you will see them stuck _ _ rocks

16. The Marine Reserve habitats of the Kent Group National Park include shallow and _ _ _ _ water reefs as well as sponge beds

19. The Spotted Handfish is only found in _ _ _ _ _ _ _ _

22. A _ _ _ _ is a crustacean with a flat shell, five pairs of legs and claws or pincers

23. The Butterfly shell is _ _ _ _ centimetres long.

25. Animals with fins and gills

26. A long slippery marine creature

29. No _ _ _ _ _ _ _ is allowed in Tasmania's Marine Reserves

30. Marine Reserves are fantastic places to _ _ _ _ _ _ _

DOWN

1. The largest animal that has ever lived

2. Look under _ _ _ _ _ to find crabs and other creatures

DOWN

3. _ _ _ _ shells can shoot venomous darts into their prey

4. _ _ _ _ snails crawl under the surface of the water shallows

5. Many sea creatures are covered with a hard _ _ _ _ _ to protect them from prey such as birds

6. Animals and plants that are very rare are called _ _ _ _ _ _ _ _ species

7. Some rays and sharks keep their _ _ _ _ in a camouflaged case while they develop

10. Big brown seaweed that creates underwater forests is called _ _ _ _

12. A group of dolphins is a called a _ _ _

14. Detergents, fuel and oil can be _ _ _ _ _ to marine life

17. The _ _ _ _ _ whale is the most common whale to strand in Tasmania

18. Marine Reserves are like under water National _ _ _ _ _

19. Please do not _ _ _ _ any living or dead material from marine reserves

20. Octopuses have eight _ _ _ _

21. The creature pictured above is a type of seahorse called a sea _ _ _ _ _

24. A narrow ridge of rocks near the surface of water that are dangerous to boats

25. Tasmania's Marine Reserves protect a diverse amount of flora and _ _ _ _ _

27. Australian fur seals _ _ _ wholly protected

28. Fairy penguins spend most of their life at _ _ _

31. Marine Reserves are good breeding ground for _ _ _ _

www.parks.tas.gov.au

Department of Primary Industries, Parks, Water and Environment

Tasmania

Dear Redmap

Where you can ask questions about you latest fab sighting and get answers from the TAFI Redmap climate change project team.

I didn't see a lot of the fish on your website that I expected. I was going to report the rare stuff like Velvetfish, Warty Prowfish, Handfish, etc. Do you still want that info?

Gretta: We do have a free-form section where you can report rare and unusual animals. We are hoping to get funding to expand the site and do more with sightings of rare things that might not be range extending. For the present we can pass on relevant information to other researchers and educators who will be grateful for that information.

The books say Ringed Pufferfish aren't common in the south but we've been seeing quite a few in 2009 hanging out at Tinderbox and in the river, should we report them?

Gretta: If you think a species is 'out of range' then absolutely log it! We looked long and hard at the list of fish that we could use as "Key" or indicator species (including extensive talks with lots of you guys!), but these are not the only species on the move. The 'Redmap' species are just there so that people who don't really know much about what is expected and common can log on and see a clear list of things to look for. If you see a species not on our list, but don't get a photo so we can 'verify' it, we will report your sighting in our newsletter and on our 'news' page but will not display your sighting on our map until someone gets a sighting with a photo – after someone manages to get a happy snap of the critter then the 'new' species gets added on to the Redmap list and any other sightings without photos of that species will automatically also get displayed. So please log your Ringed Pufferfish by selecting 'other species' on the reporting form and then entering the species name in the dialogue box.

Some of our favourites from your portfolio

Family, Form and Fun

Presenting Sarah Pidgeon

.

If Sarah was American they would call her something daggy like a “netball mum”, but she has a way broader world view than Sarah Palin. Our Sarah is one of those people with a winning warm smile and she transfers that warmth to her photography. Her other interests are her family and the desire to express herself in film between bouts of roughhouse kids play.

She has been on so many photography courses with her girlfriends that the husband feels like a ‘photography widower’ and wants her to stop, but hopefully she doesn’t.

Sarah seems to exude calm. So, I’m looking at her photos and trying to find the hidden evil without success, maybe next portfolio.

(I bet that constant smile is a front and she pulls the wings off flies in real life)

After the clouds, the sunshine,
after the winter, the spring,
after the shower, the rainbow,
for life is a changeable thing.
After the night, the morning,
bidding all darkness cease,
after life's cares and sorrows,
the comfort and sweetness of peace.

Helen Steiner Rice

THE ROCK POOL

This is the sea. In these uneven walls
A wave lies prisoned. Far and far away
Outward to ocean, as the slow tide falls,
Her sisters through the capes that hold the bay
Dancing in lovely liberty recede.
Yet lovely in captivity she lies,
Filled with soft colours, where the wavering weed
Moves gently and discloses to our eyes
Blurred shining veins of rock and lucent shells
Under the light-shot water; and here repose
Small quiet fish and dimly glowing bells
Of sleeping sea-anemones that close
Their tender fronds and will not now awake
Till on these rocks the waves returning break.

EDWARD SHANKS

hear the children chattering; and I see, at times,
Sailing across the high seas in its pride,
Over the gables of the tranquil village,
Some winged ship which is traveling far away,
Flying across the ocean, hounded by all the winds.
Lately it slept in port beside the quay.
Nothing has kept it from the jealous sea-surge:
No tears of relatives, nor fears of wives,
Nor reefs dimly reflected in the waters,
Nor importunity of sinister birds.

Victor Marie Hugo

My Compact Camera

Compound Ascidians?, Derwent River, Mike Jacques

Critter Files

Weird and Wonderful - Goblinfish

Glyptauchen panduratus Seen by Tim Walter at White Beach Nubeena in 4M, photo per Aust Museum website

Last month we noted that Tim Walter saw a Goblinfish off White Beach. Here is some more information. The odd little Goblinfish, *Glyptauchen panduratus*, resembles the tropical Stonefish, but is more closely related to the Soldierfish and has a similar sting.

It is usually seen on the bottom alone in shallow waters and not much is known about it. It may be highly localised and vulnerable to population decline if the coastal habitat is damaged in any way. The species is part of the bycatch in trawl fisheries, including prawn trawling in South Australian waters.

Its population density may be quite low to start with as bottom dwelling fishes often don't move around much and can be few and far between. Very little is known about its numbers, biology, ecology, and population dynamics.

Habitat: Sand and Mud
Depth Range: 3 to 50m
Size: 20cm
Distribution: Tas, S.A. NSW and Southern WA & VIC

Underwater photography … a DIYer's journey

By John Smith

Underwater photography has come a long way since its infancy way back in the 1950s. Pioneers like Hans and Lotte Hass and Jaques Costeau were probably the best known of the early u/w photographers, designing and building their own equipment and followed by well-known Australian divers like Ben Cropp, Ron and Val Taylor, Steve Parish and others throughout the 1960s and 70s. Back then there wasn't the huge variety of housings and u/w lighting equipment that's available on the market today, and what was available was generally expensive and aimed at professionals – way out of the reach of your average amateur diver photographer.

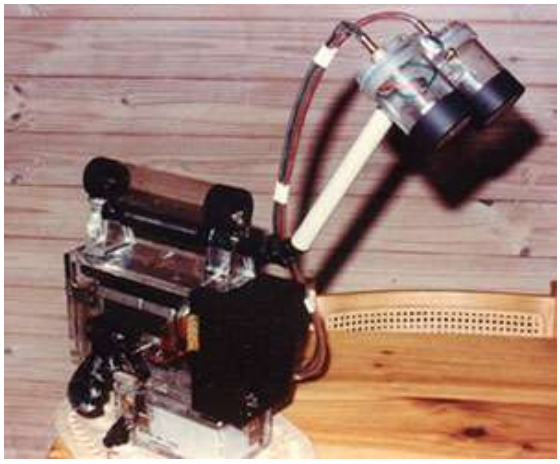
One way to overcome this was to build your own housings, and with only a little knowledge and a few basic tools it was surprising what could be achieved. These home-made setups mightn't have looked as pretty as today's rigs but they got the job done…well sort of, and not without a few disasters along the way! There always seemed to be someone in a dive club with some level of engineering expertise, perhaps even a lathe, and it wouldn't be long before budding diver/photographers would be seeking this person out to get their 'system' underwater.

Perspex was by far the most popular material for the DIYer, though some of the more talented folk were able to construct their own aluminium housings using sand moulds. But perspex was reasonably tough, allowed visibility inside the housing, could be easily machined and once you got the hang of it, successfully bonded so as not to implode under extreme pressures. Constructing a housing that could keep leaks at bay and still allow manipulation of camera controls became just as challenging as 'getting the shot' itself, and for the DIY hobbyist it added a whole new dimension to the sport. Here's a few of my projects over the years.

My first 'successful' housing (at least the first I was actually game enough to take in the water) was for a Kodak Instamatic 126 camera. It was a simple perspex box with shutter and film-advance controls, a removable side secured by wing nuts and a hard-wired external flash reflector and bulb. No handles or viewfinder – the epitome of 'point-and-shoot'. Being exposed to seawater the flashbulb fired perhaps once in five or six attempts. By today's standards it was a dismal failure, but at the time I was happy just to bring anything back…

like this one, my first effort.

Next came a bigger box, this time for a Hanimex super 8 movie camera. It also had wing nuts securing the removable side, shutter and zoom controls, an orange perspex 'gunsight' viewfinder, and a pair of plastic plane handles that made using the thing u/w a lot easier. It looked pretty impressive at the time but results were disappointing. At any depth over a few metres there was never enough light so movies tended to be under-exposed and monochrome. Anyway, I eventually flooded this housing so was soon looking for an upgrade.



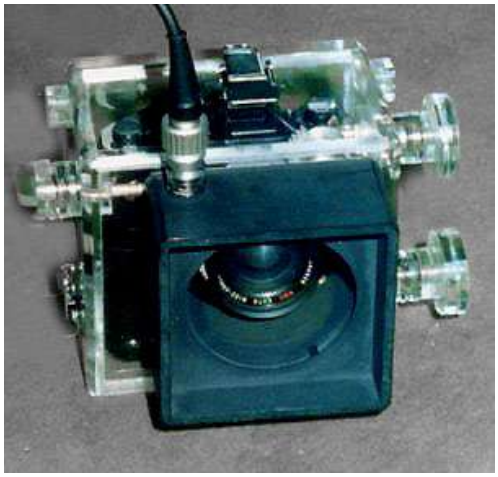
It would be a Ricoh Super 8 movie. My 'perspexing' skills had advanced in leaps and bounds by now and this housing was a delight to use – well balanced, comfortable to manoeuvre with moulded aluminium handgrips, s/s spring clips on the removable side, even a rear viewfinder concocted from a security door peephole. The lights were 100 watt halogen projector lamps housed in clear plastic tubes and powered by a 12 V lead/acid gel battery. They added a bit of colour to the movies, at least on the odd occasion when the housings didn't leak and short out the lights.

All the while still photography remained on the horizon and a 35 mm Calypso/Nikkor soon replaced the Instamatic. Like movies, still film was hungry for light and dedicated u/w strobes were expensive. The DIYer got around this (perhaps never really successfully) by housing small land flashes and using them in numbers, hence the Hanimex/Rollei strobe combination on the right. It never dawned on me at the time (and probably wouldn't have mattered) that these little strobes produced light of different colour temperatures.

When video came along in the early 80s I offloaded the movie gear and launched into VHS. The ½ inch camera/recorder combos were monsters compared to today's minicams, and my first video housing

(complete with batteries and lights) weighed over 30 kilos of water - a real beast getting in and out of an inflatable. While it handled well in the water, results for the effort expended in getting it there just didn't match up. Early video it seems was not suited for use u/w.

A later chopped-down version of the same setup with just one battery and light made it easier to handle, but results remained poor. The recorder housing had cracked at 20 metres and needed reinforcing, and a big lump of lead had to be attached to the bottom of the housing just to achieve negative buoyancy. All in all it was a costly and frustrating venture.



Meanwhile still photography was still an interest, but the Nikonos cameras restricted amateurs to mainly macro stuff. The standard lens was a 35 mm which converted to around 50mm u/w and was pretty useless. The Nikonos 15mm w/a was a great lens but very, very expensive, so most amateurs had to satisfy themselves with extension tubes or close-up attachments for the 35. If you wanted to go wide, DIY housed SLRs with dome ports seemed the way to go. The housing on the left was my next project, built for a Nikon FE with motordrive and 24mm lens. Teamed with a dedicated u/w strobe (Marine Sunpak 32) it was a handy little unit and gave some pretty fair results. I blew (or rather sucked) the dome port by heating a piece of 3mm thick perspex in the oven until it was soft then placing it over one end of a length of 100mm dia PVC pipe. The other end of the pipe was sealed except for a hole for a vacuum cleaner nozzle, and once the vacuum had done its job the resulting semi-dome shape was perfect. A major problem though was that the port had to be glued in place so the setup was confined to wide-angle only. I got around this in later housings by using interchangeable Ikelite ports.

When Video 8 camcorders came on the scene I couldn't resist one last shot at video. The camcorders were still big compared with today's midgets but were a vast improvement over the VHS monsters of the past. I found that painting the housings hid a lot of messy gluing misdemeanours, looked good, and still allowed visibility into the housing if the bottom and rear sides were left clear. The results with this setup were a big improvement over VHS, but still light years away from those of today's high definition handicams. This was in the mid 80s would be my final attempt at video. From this point on I decided to concentrate on stills.

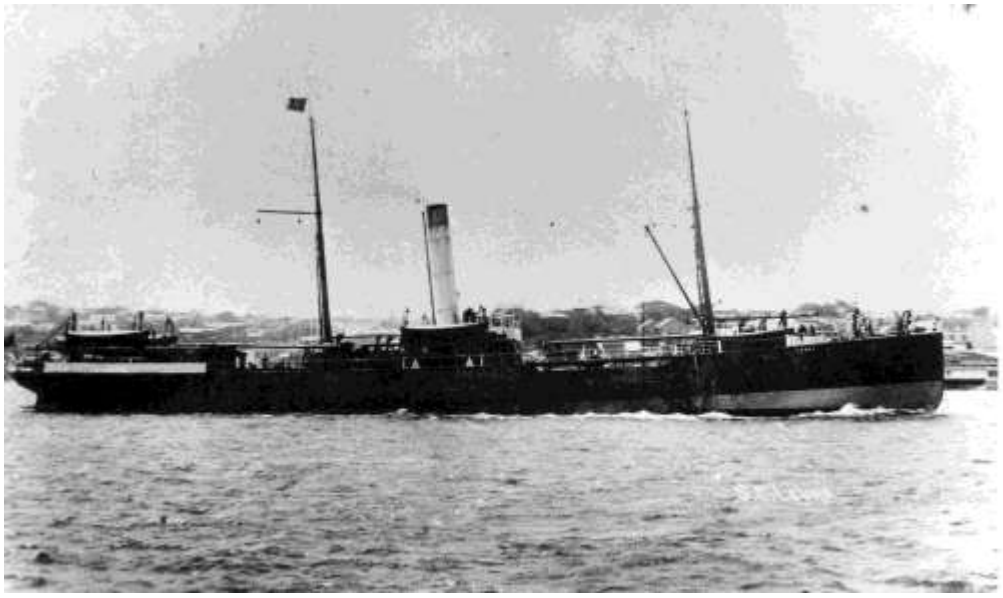
The last housing I built was probably the best in terms of ease of use and versatility. It was for a Nikon F3 with motordrive, action viewfinder and twin SB10 strobes. Ikelite flat and dome ports could be interchanged for close-up and wide angle work. It was made from 12mm perspex and reinforced so it survived depths to 50 metres, albeit with a few heart-stopping creaks. It's still going strong today and a few years ago I modified it to take a Nikon D70 with a couple of old Sunpak strobes – just for a bit of nostalgia I guess. It's still a nice setup to use though the combination of digital camera and analogue strobes is proving a little problematic. An unintended plus is that the camera is now so high off the floor of the housing it would probably survive all but a major flood.

Today's advances in modern digital cameras and strobes, the myriad of controls needed to operate them and the availability and affordability of dedicated underwater housings have probably marked the end of the u/w housing 'do-it-yourselfer'. Personally I don't think I'd have the patience to build another one - far easier to buy an off-the-shelf housing and tinker with that if need be. But while I wholeheartedly embrace the modern digital technology and all it has to offer underwater photography, I've thoroughly enjoyed the journey getting here. It's been challenging, interesting, frustrating, and fun…and I wouldn't have missed it for the world!

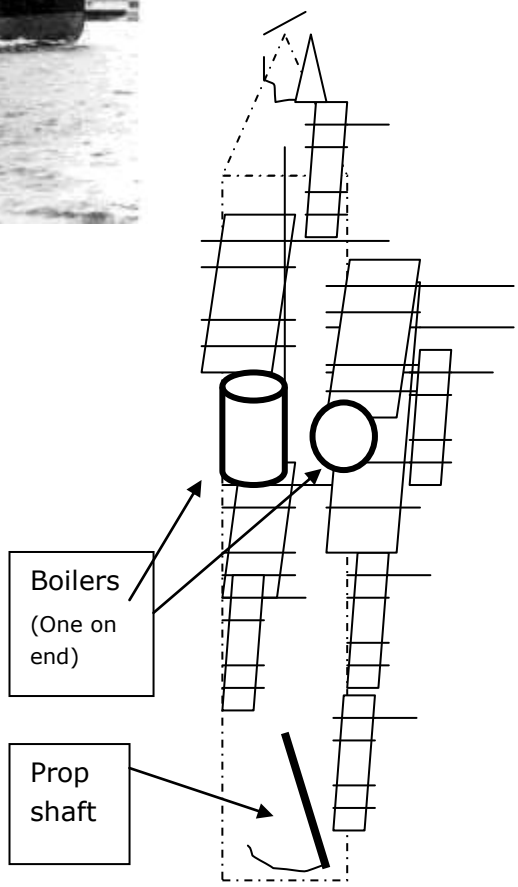
Maritime History

Betsy Island Graveyard – The S.S. "Leura"

The "S.S. Leura" was a 758 ton iron screw steamship built in Liverpool in 1875. She was a conventional 'tramp' steamer and a regular in Australian ports from 1878. She operated mostly out of Melbourne until in 1921 she was considered too old for further repair and was laid up. The tug "Eagle" towed her from Melbourne to Hobart in August 1921 where she was stripped and acted as a storage hulk for the EZ works at Risdon. She became increasingly derelict until finally stripped of any useful items and scuttled about 500 metres south of the Little Betsey in 1934.



The vessel is heavily broken up with only the two boilers showing up on the sounder. For this reason she can be difficult to locate. Not as deep or as intact as the "Musgrave" it doesn't attract the same invertebrate life, but often has better fishlife. When relocated by divers for the first time in the early 1980s she was covered in schools of Bastard Trumpeter. Although they have long-since become scarce, she still attracts school fish and the occasional Boarfish. The whole area can suffer from bad visibility when there are strong river outflows and the weather has been swelly, but it is still a big wreck and well worth the effort of a dive.



Dimensions: 250.8 ft x 32.5 ft x 16.25 ft

Rolli's Shark Encounters

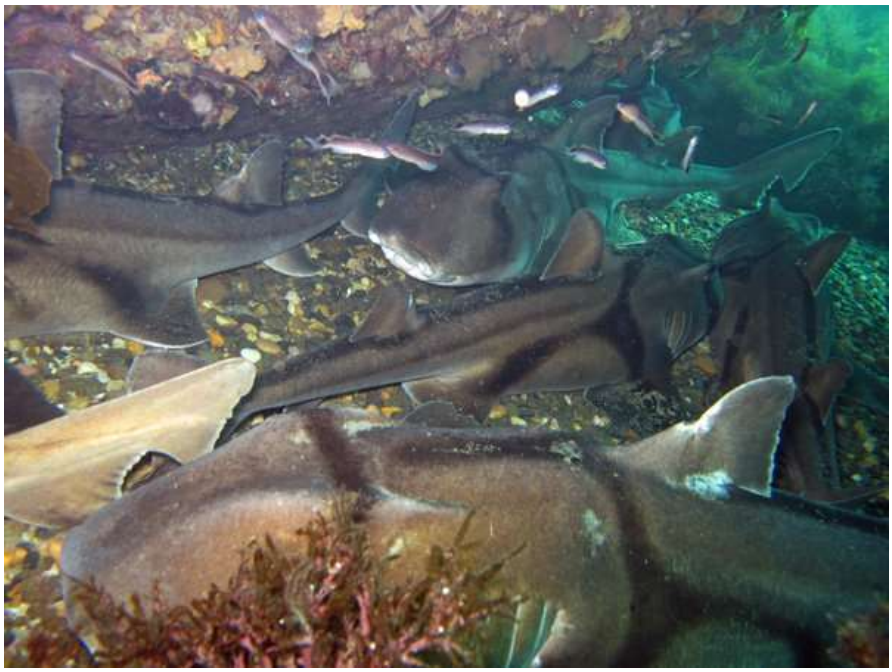
Port Jackson Slumber Party

On a casual, lazy dive at dusk at one of my favourite shores dives at Low Head, I drifted out to one of my usual haunts – a small bommie which lies in about 10 metres of water. It's not uncommon to encounter the odd Draughtboard or two here, along with the usual array of Magpie Perch and various Wrasse.

However, on this particular dive I noticed the tail of an unfamiliar shark poking out from one of the corners. It looked a bit like a Port Jackson, but having never seen one before I couldn't be sure (and I'm not totally stupid as Emma wasn't sure what it was to start with either when she saw the photos). As I moved in for a closer look, the ledge underneath the bommie was chock full of 1-1.5m Port Jacksons, probably 12-15 in total. Their scientific name, Heterodontus portusjacksoni, sounds like an orthodontic condition combined with a jumbled up word created by someone who ran out of ideas.

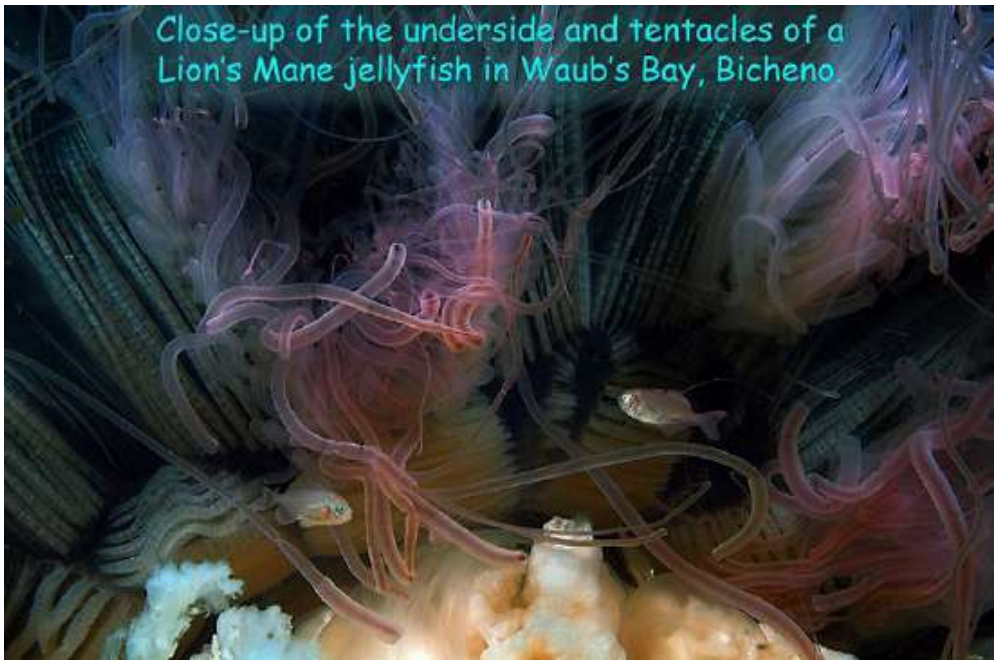
They seemed unperturbed by my unannounced visit and let me approach them and photograph them without any concern. I spent about 5-10 minutes with these beautiful animals before they started to get restless so I headed off on new adventures and left them to snooze. I found them to behave in much the same way as a Draughtboard shark – shy but not scared, and relaxed in their demeanour and movements.

According to Edgar (2008), the female Port Jacksons may migrate from NSW to as far south as Tasmania during the warmer months, which would certainly tie in with the warm eastern Australian currents that wash away the frigid winter waters on our North coast during the summer and autumn seasons.



Critter Files – Lion's Mane Jelly

Courtesy of John Smith and Bicheno Dive Centre



At this time of the year offshore winds and currents bring clusters of Lion's Mane jellies inshore at Bicheno, and particularly into Waub's Bay. These are the world's largest species of jellyfish and in polar waters can attain a size of a metre across with tentacles up to 10 metres long. While they're not quite this size in Bicheno, they nevertheless make wonderful photographic subjects, particularly with the array of interesting smaller animals that shelter amongst their tentacles

WHATS ON in March 2010

Major biological events and Sighting Reports

South East – Several different groups of Yellowtail Kingfish have been seen in the Derwent and Tasman Peninsula lately when they are rarely observed outside the North East. Adriaan took a snap and reported it to the Redmap team.

Lots of weird and wonderful fish from Bass Strait are currently in the river and down the east coast including Herring Cale, Zebrafish and dozens of others. Get you camera and start reporting

(you should report any interesting finds to the TAFI CCRedmap project at www.ccredmap.org.au)

Landcare and conservation events (more details this issue)

1-7 March - Seaweek MESA

2/5/& 7 March - Clean Up Australia Day

4th March - 6pm – 8pm Talk on Oreilton Lagoon

9 March - NRM South Forum

14 March - Arm End Coastcare Fun Day

23 March Regional Coastal Forum - Ulverstone

22-25 March - National Landcare Forum

Amalgamated club calendars

Like to get in touch with someone for a dive or day out, email us and we'll forward your message. If you would like to advertise your club calendar also drop us an email.

South East

13/14 March Pedra Blanca TSDC

20/21 March Nine Pin Pt TSDC

27 Dive safety incl flare demo (Opossum bay) TSAC

East Coast

6-8 March Cape Portland TSDC

6-8 March Bicheno ODP

6-8 March Bicheno TSAC

20 March Ille de Phoques TSAC

Try Bicheno Dive Centre or Bay of Fires Dive St Helens , or East Lines St Helens

North West and West

13/14 Barrenjoey seal colony (or NW Coast) ODP

20 March Tamar River ODP

27/28 Barrenjoey seal colony (or NW Coast) ODP

27/28 March Low Head TSDC

Wynyard Dive Centre

Canoe n' Surf Devonport

Go Dive Launceston ask if Fitzy is going anywhere

Oceans Plus Dive Club

Leven Scuba Club may also have ad hoc dives planned and go out most calm weekends.

Adult Ed Summer Program For more information www.adulteducation.tas.gov.au

12 March– Sea Kayaking Intro, Roaring 40s Ocean Kayaking

17 March – Early French Explorers and Aboriginal People, Annick Thomas

18 March – Marine Science on and Under the Water, Kevin Redd

27 March – Sea Kayaking Day Trip to Bruny, Roaring 40s Ocean Kayaking

28 March – A Walk around Battery Point, Tony Rayner

Essential news and links for the perfect day out

Likely water temperature

http://www.bom.gov.au/cgi-bin/nmoc/latest_YM.pl?IDCODE=IDY00004

Water apparently 2 degrees warmer than this time last year. Minimum temps everywhere are 19 degrees.

Vis recently

Tamar- a bit down lately as low as 10M visibility.

NW Coast - Conditions ok with about 8 to 10M viz in the outer Mersey, more in the Strait. Bicheno – reports of 15-20 Metres

Link to marine wind forecasting

http://www.bom.gov.au/jsp/marine/wind/index.jsp

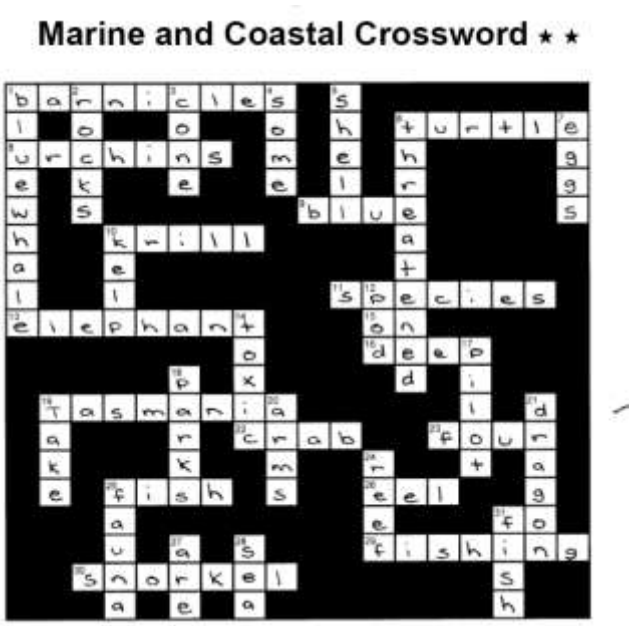
Moon phases and Tides - Low Head, Hobart & Burnie

http://www.bom.gov.au/oceanography/tides/MAPS/tas.shtml

Advanced weather planner based on past records

http://www.bom.gov.au/climate/averages/tables/cw_092003.shtml

Crossword answers



How to help us get the message out

We are asking people and organisations to help circulate the newsletter. Please ACTIVELY distribute Marine Life amongst your interest group, friends and colleagues so we can get the message out there, or give us email contacts (after asking your people for any objections to release of email contacts) so that we can distribute it for you.

How to make a contribution

This involved sending us an article by email, preferably not too long and with a photo or two. Sorry, no money, its all a love job and just for the glory. We'll use your contribution for the purpose for which it was given, for non-commercial uses and with attribution. *Contact Us; marinelifetassie@gmail.com*

OH NO, SCUBA DIVING OVERLOAD!

We are trying to appeal to all non-mainstream marine activities in, on, under, or near the ocean like, surfriders, beachcombers, shell-collectors, coastcare, fishcare, canoe and kayak, sea bird and marine mammal enthusiasts, marine scientists, maritime history buffs, sustainable fishers, scuba divers and snorkelers, et al. So send us your news and photos and give these scuba divers a run for their money.

If it gets wet and salty at least twice a day we want to know about it.