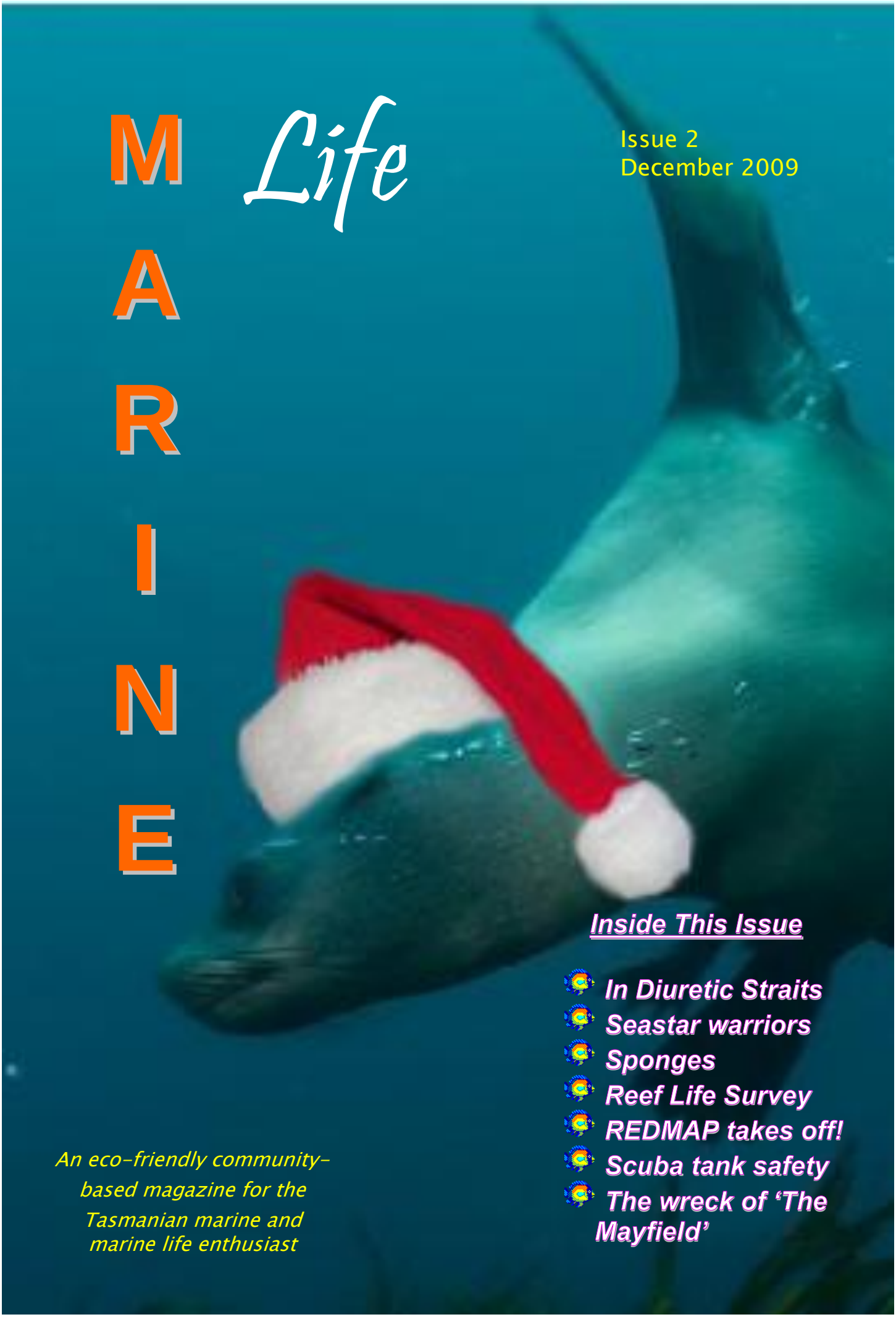
MARINE Life

Issue 2
December 2009



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

Inside This Issue

Our goal

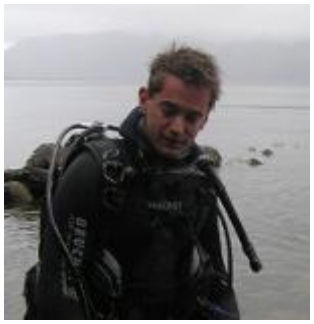
To educate, inform, have fun and share our enjoyment of the marine world with like-minded people.

Our Team

Mike Jacques

Editor in chief and author of "Dive Tasmania". A composer according to Google, but better to be a composer than a decomposer.

The diver formerly known as Rolli or Geoff



Our man in the North. Member of Ocean Divers Plus. Apparently an Arabian Prince (no oil money though) A man of letters, normally four letters.

Emma Flukes

UniTas honours student in marine science. Former Spice Girl (the lesser known "Science Spice") who quit after protesting that the Wattage of "Girl Power" couldn't be empirically measured.

Phil White

Our man in the North West. Fuzzy since alien kidnapping trauma. Another member of Beards Anonymous and the Leven Scuba Club.

Marine LIFE

Underwater this issue

Photo per CSIRO

The big stories…

Fishing for the Future

(by Mike Jacques)

Rock Lobster Fishery Review – the changes

The latest cray fishing review will be controversial, with proposals to create an upper size limit. This is a necessary response to increasing urchin barrens down the East Coast. Large crays are the main predators of the introduced black urchin, although this maximum size limit doesn't address the issues of how to allow enough small crays to escape the pot until they get to a size big enough to attack the large urchins.

The professionals have one idea which is to push for a 20% cut in the recreational take. They have recently accepted a cut of that magnitude and want *quid pro quo*. Very reasonable sounding, but there are a few of the usual theories around about the motives for the professionals accepting that cut. One with some possible validity is that they settled on 20% because they weren't catching that amount of their quota anyway as a result of the parlous state of the stock. I do know that a deeper cut was originally recommended by the science community and was rejected. From the stock reports it seems clear that more meaningful cuts will be required by everyone and recreationals are unlikely to escape these changes. When the final discussion proposals come out we can expect a bun fight.

To be involved there is an online questionnaire at http://www.fishing.tas.gov.au. A full discussion paper about broader questions on the fishery will be released later. A new management plan will be introduced in March 2011.

Marine Police Active in the North

Marine police were sent north in early November in response to gossip that divers were refusing to accept a late start to the cray season, as that would stop them from fishing during the Launceston Show Day long weekend holiday. The late start to the season was brought in as it was found most crays in the first week of November were still in berry and could not be caught anyway. The fishing activity was only disrupting breeding behaviour without giving much benefit to fishermen. As it turned out the story was a bit more complicated. Reputedly some Service Tasmania outlets in the north had been advising fishers of an incorrect start date to the season. I wonder who reaped the biggest harvest in the end?

I have also heard reports that a blitz on scalefishing compliance in the North has netted some results with several older recreational fishermen caught who were obstinately refusing to respect closed fish nursery areas around Port Sorell. Searches have been very thorough with queues forming to get off boat ramps in some instances. Well done boys in blue.

CSIRO News

Keeping marine pests out of Australian waters - website catalogue

Over 250 introduced marine plants and animals have hitch-hiked to Australian waters on vessels of all types. Some have taken over habitats from our native species, changing our coastal areas and damaging our fishing, aquaculture and tourism industries.

To protect our marine environment and industries, the Australian and state/territory governments, along with marine industries and marine scientists, are implementing the National System for the Prevention and Management of Marine Pest Incursions.

A marine pest website http://www.marinepests.gov.au/ is now available providing detailed information on the National System and sector specific marine pest management measures, including:

- marine pests and their impacts on industry and the environment
- identifying marine pests
- distribution of marine pests in Australia (interactive map)
- current marine pest outbreaks
- managing ballast water
- managing biofouling on recreational vessels, fishing vessels, commercial ships, non-trading vessels and petroleum vessels equipment and infrastructure
- the National System

Read More

Genetic data is helping us to understand the deep sea

Like tropical coral reefs, deep sea corals are an important component of seamount communities as they are abundant and provide important habitat for hundreds of other marine invertebrate species, however we know very little about how or where the larvae of these animals disperse. A new CSIRO project will build on previous work by Karen Miller of the University of Tasmania. So far, this research shows that colonies of the black coral on the Lord Howe Rise off the Australian coast are genetically different to those on the Norfolk and Kermadec Ridges to the north and west of New Zealand. Interestingly, for two widespread stony coral species the CSIRO have found only low levels of DNA variation between coral populations separated by thousands of kilometres in Australia, New Zealand and Chile.

The research also found many new species Overall it appears that levels of seamount coral biodiversity are likely to have been underestimated.

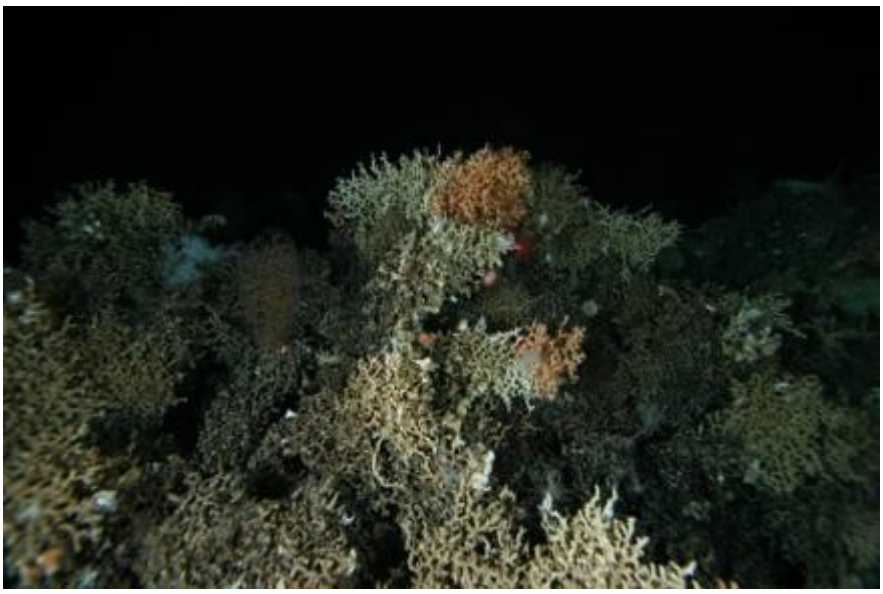


Photo of the stony coral Solenosmilia variabilis populations on a seamount south of Tasmania (photo: CSIRO)

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Coastcare Week

Coastcare Week 2009 is fast approaching and all Coastcare stakeholders are invited to take part in events planned across the state. Coastcare Week is undertaken nationally each year in early December and is being held December 7th to December 13th in 2009. The Week aims to raise awareness of coastal management issues with the general public and also celebrates the great work of Coastcare groups around Australia.

Coastcare Week's 2009 theme is "Living on the Edge" and one message SCAT would like to spread is that we all have an impact on our coastal environment regardless of where we live, be it on the coast or many kilometers inland. Making simple changes in everyday life will help Coastcare groups manage the environmental issues they tackle each day.

SCAT and NRM South are joining forces to acknowledge the achievements of a variety of coastal stakeholders throughout the year by jointly hosting the event "Sharing the Shoreline – Project Showcase." This event will be held at the Elizabeth Street Pier Function Centre. The showcase will highlight a diverse range of coastal, estuarine and marine projects happening all over the southern region by industry, local government, state government and the community.

Short presentations, running from 4pm – 6pm will be followed by celebratory drinks and finger food from 6pm – 7.30pm. Please join us to help celebrate your achievements for 2009.

RSVPs are required.
Contact Jill Pearson at NRM South: ph 6221 6126 or email jpearson@nrmsouth.org.au

The Tasmanian Coastcare Week calendar is included at the back of this edition of the newsletter

Ocean views on Google Earth

The latest version of Google Earth (version 5) will allow you to dive beneath the surface, explore a few select areas of the ocean. To view some of the marine protected areas in Australia - Launch Google Earth, then in the "Layers" pane select and expand the Ocean folder to see the list of items including Marine Protected Areas. Navigate to the map of Australia by dragging your mouse, then zoom in (using the slider on RHS) and click on the corresponding symbols of features of interest.

Download the software - http://earth.google.com/ocean/ and to "Explore the ocean" - http://earth.google.com/tour.html#v=4

Read More

Art and Photography competition

The WetlandCare Australia National Art and Photography Competition 2010 is open for entries. The theme for this years competition in *Wetlands, Biodiversity and Climate Change,* reflecting the theme of World Wetlands Day 2nd February 2010.

Entry forms and information on the competition can be found on the WetlandCare Australia website www.wetlandcare.com.au, or alternately contact Liz Hajenko on (02) 6681 6169.
For more information on World Wetlands Day visit the website:
http://www.environment.gov.au/water/topics/wetlands/world-wetlands-day/i%0Andex.html

The categories in the Competition have been designed to give as many people as possible the opportunity to submit entries. The categories are:

- Department of Environment, Water, Heritage and the Arts Open Art
  1st Prize: $1250
- Central West Catchment Management Authority Children's Art Senior (ages 12-17)
  1st Prize: $1000 & an Art Supply kit, including papers and paints
- Murray-Darling Basin Authority Children's Art Junior (ages 4-11)
  1st Prize: $1000 & an Art Supply kit, including papers and paints
- NSW Department of Environment Climate Change and Water Open Photography
  1st Prize: $1250
- Children's Photography (ages 4-17)
  1st Prize $1000 & a Steve Parish book pack

All artworks and photographs must be on paper, unframed and up to A3 in size.
All categories of the competition are acquisitive; reproductions of the winning entries of the WetlandCare Australia National Art and Photography Competition may be used by WetlandCare Australia to promote wetlands, and the work of WetlandCare Australia.

The winning Artworks and Photography may also be used by WetlandCare Australia to develop products for fundraising purposes. Reproductions of the winning entries may be used by major sponsors in their media and promotions, with the artists always being recognised by name.

The artist will always be acknowledged wherever a work is reproduced.
See the Rules of the Competition, available with the Entry Forms below, for more information.

http://www.wetlandcare.com.au/Content/templates/news_detail.asp?articleid=756&zoneid=1

Community Feral Oyster Control Program

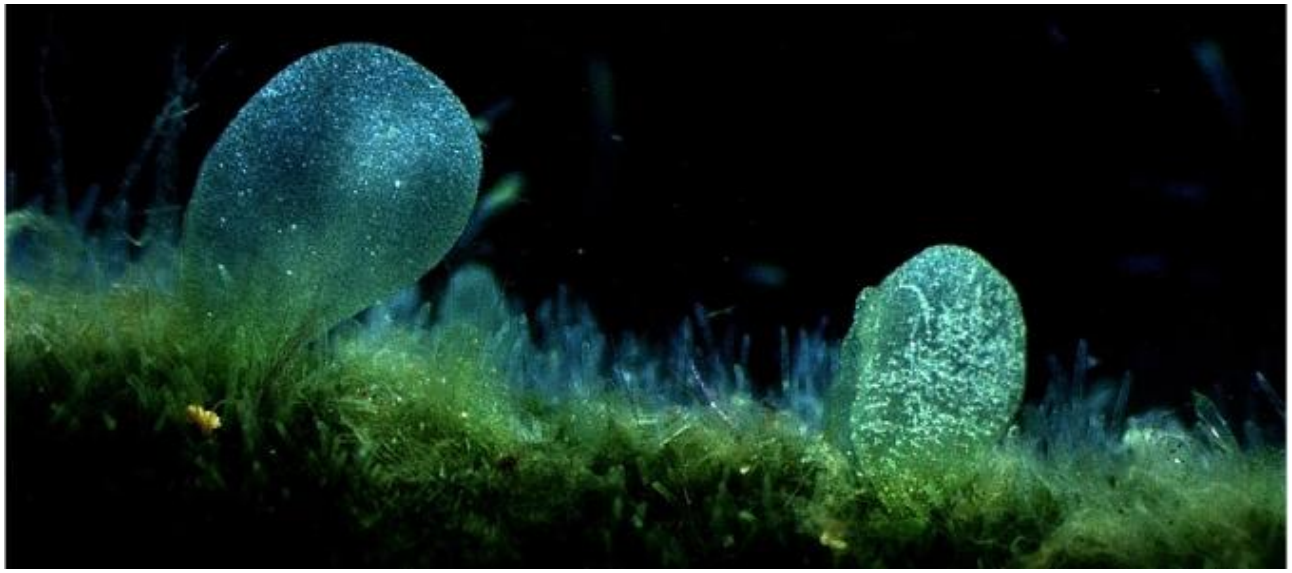
Since their introduction to Tasmania in the 1940s for marine farming, pacific oysters have become naturalised and widespread and are an environmental pest issue that is little appreciated. Apart from their ecological impact, oysters reduce the ability for people to enjoy coastal places. This project involves the identification of stretches of coastline where feral oysters are an issue (particularly for public amenity), prioritisation of sites, the development of a community control toolkit, and on-ground clean up days, supporting local Coastcare groups with Conservation Volunteers Australia (CVA) teams. Oliver Strutt has been engaged as the project coordinator to implement the project activities
Clean up days will begin this summer. If you would like to be involved or to find out more, contac oliverstrutt@scat.org.au 0407 784 945

Celebrating Scholarship Holders

[This is the first of a series of profiles to acknowledge and encourage the commitments being made by budding new scientists to their Honours and PhD research. Today we would like to congratulate all scholarship holders. Keep up those long, lonely, nights of reading. Just remember, the magazine is here for you if you need some excuse, other than Facebook or Mills & Boons, to avoid study and zone out on light reading – Ed]

Fiona J Scott

"The conservation significance of macroalgae and their role in marine protected area planning" with specific emphasis on the apparently-rare, endemic macroalgae of southern Australia"



Erythrotrichia ligulata*, a red algal epiphyte currently known from only 3 localities in southern Australia.*

Fiona's PhD examines the existing geographical distribution of little-known species, and to undertake field surveys of the actual distribution and habitat requirements of a selected model group of these. The results will help determine the benefits of Marine Protected Areas (MPAs) in safeguarding genuinely rare algal species. With a desire to better understand the nature of algal rarity in the marine environment, the project requires consideration of the following questions. Is the paucity of records of apparently rare algal species an artefact of collection techniques and areas surveyed? Are these species just naturally rare, but widespread? Or, do they have specific habitat requirements and co-occur with specific combinations of physical habitat characteristics? (Her supervisors include Dr Graham Edgar, Dr Neville Barrett

(Tasmanian Aquaculture and Fisheries Institute) and Prof Jamie Kirkpatrick (School of Geography and Environmental Studies, UTAS.)

Current progress - Her searching of Tasmanian Herbarium records and published data show that 142 species currently fit the nominated, apparently-rare criteria of having five or fewer verifiable records. By mapping and analysing specimen-based data sets and published accounts, centres of algal endemism, richness and (apparent) rarity can be detected. Moreover, by relating the locations of the centres of rarity to local environmental features, the location of additional centres of rarity in largely unstudied regions can perhaps be predicted. Testing the reality and underlying physical causes of "centres of rarity" is an important and challenging part of the project. Field survey work is currently being undertaken in Tasmania and involves underwater visual census in the form of timed swims recording the macroalgae at selected "hot spots", at sites of similar physical characteristics to these centres, and at randomly selected sites.

Fiona's work links with other Marine Biodiversity Hub projects under way at the University of Tasmania dealing with the ability to predict rarity in the marine environment and the extent that patterns of rarity may be explained by readily defined physical habitat characteristics.

Fiona completed a BSc at Monash University, and an MSc from the Botany School, University of Melbourne. Her studies included marine macroalgal morphology and distribution at the University of Melbourne (with Dr Gerry Kraft), James Cook University of North Queensland (with Assoc Prof Ian Price), the Compton Herbarium, Cape Town (with Prof Richard Norris), and more recent work in marine protistology at the Australian Antarctic Division (with Professor Harvey Marchant).

Birds Tasmania

Short-tailed Shearwater (Tasmanian Muttonbird) - request for information

(courtesy SCAT news)

Birds Tasmania has received a number of reports of high numbers of Short-tailed Shearwaters (Tasmanian Muttonbirds) carcasses beach-washed on the east coast of Tasmania since early November. Beach surveys have recorded densities of carcasses approaching one every 20 to 30m along beaches. Preliminary numbers appear to be lower than a similar event two years ago, but we are asking everyone to assist us in our efforts to describe the event. We are asking anyone who is visiting beaches until Christmas to record the numbers of beach-washed shearwater carcasses observed, and an estimate (or measure) of the distance of beach surveyed. It is also worth looking for banded birds.

Please record the date, location, number of carcass, distance walked/surveyed, and any general comments on the condition(s) of the birds - how fresh, whether the carcass is complete (or scavenged by gulls etc), and any other comments of interest. If you find a banded bird, please record the band number and collect the band. If you have photographs that illustrate particular aspects of interest, please forward them also. **Please do NOT collect any carcasses**.

Please send any information and photographs to:
Dr Eric Woehler
Birds Tasmania, GPO Box 68
Hobart 7001
eric.woehler@gmail.com, ph 6223 1980 (h) or 0438 204 565

Please send any bands to:
Australian Bird and Bat Banding Scheme
GPO Box 8
Canberra ACT 2601

In Diuretic Straits

The "adult' section

by Hector Crawfish

Lets visit a subject rarely brought up in polite dinner party discussion…*piddling in your wetsuit!* Is it OK? Is it bad? Who does it? Will I be shunned for life if found out? Admitting to opening the floodgates in your wetsuit is a bit like fessing up to masturbation. There are people who cheerfully own up to having vigorous out of hours activities and those who adopt an indignant look and strenuously deny ever indulging in such furtive pleasures. Same with wetsuit wee wee's. Fact is, most swimmers, surfriders and divers invariably feel an increased need to urinate at some point during the swim or straight afterwards.

The reason is a phenomenon known as immersion diuresis and occurs whenever the body is emerged in water. Immersion, along with a water temperature that is colder than air, causes narrowing of the blood vessels in the extremities. This vasoconstriction occurs primarily in the skin and superficial tissues of the body as well as in the muscles of the arms and legs. The result: An increased volume of blood is sent to the central organs of the body such as the heart, lungs and large internal blood vessels. The hormone that controls the production of urine by the kidneys is called anti-diuretic hormone (ADH). It controls when and how much urine your kidneys make. The increased blood volume to the major vessels is interpreted by your body as a fluid overload.

This overload causes ADH production to stop, which in turn allows the kidneys to immediately produce urine to lower the centrally circulating blood volume -the body's automatic response to preserve blood volume. Once you exit the water, circulating blood volume returns to near normal - less the fluid taken to produce urine, which is quickly replaced as the body draws fluid from body tissues, such as muscles. Unfortunately, you probably will also leave the water with a full bladder and will need to urinate right away.

Is it OK to sigh and surrender in your wetsuit? The answer is generally not. Apart from the social stigma and a latent odour problem, urinating in a wetsuit can increase the risk of hypothermia. Warm fluid dilates the surface capillaries and we end up with increased heat loss when it cools down. That warm runny feeling is really very temporary. What's to be done about this pressing problem then? If you're a habitual widdler, one thing not to do is dehydrate yourself. Not drinking only makes things worse as you are at an increased risk of exhaustion

and decompression sickness if a diver. Plenty of fluid will also dilute your urine, making it less colourful so if you have a quick wizz, there's less chance of a telltale yellow current. It also goes without saying that diuretics like coffee and alcohol should be avoided. *Other strategies worth considering are.*

Dive naked. A delightful vision of swimming as one with nature, mermaids cavorting in sunlight dappled waters. Feel the need? Wssssss….Aaah that's better.

Buy a wetsuit with a fly. More of a solution for the blokes and then there's the problem with groping around under your togs trying to find your whistle. Solution: wear nothing under the suit (but don't forget this when you change please). Wetsuits with flys look worryingly like ugly black inflatable love dolls. (I neither confirm nor deny 1st hand experience here!)

Peel your wetsuit off before relieving yourself. Can be done, has been done. Matter of fact I've done it! Such determination when facing the yellow peril is admirable but some practice wouldn't go astray.

Wear a drysuit with an incontinence pad.

A solution for both boys and gals. Drysuits with appropriate thermal underwear will reduce the need to urinate by keeping you warm both in and out of the water, but sooner or later…. The only major problem with pads is how to place and remove them discreetly in front of your prudish buddies. They squeak and rustle as well although a big fat pad can mask some size related issues. A drysuit fitted with a "P" valve is also an option for the blokes and then you have to glue on a catheter condom. Sometimes you gotta wonder if diving is really worth it.

Squish your bladder. Pressing hard on your bladder can often provide temporary relief but may be interpreted by your buddies as something more serious. Shouldn't be done too often.

Use drugs. *Yeah maan, hit up some ADH..Whooee everythings all spinning like crazy*!! …..well maybe not, but a synthetic version of the anti diuretic hormone, vasopressin is available. Known as Desmopressin or DDAVP, it is usually prescribed for Nocturnal Enurisis or bedwetting gas we commonly know it. There is little information available regarding the use of this medication for divers and swimmers should anyone consider it, they would be well advised to consult with a dive medicine doctor.

Just do it. You've still got 15 minutes deco left. What are you going to do? Break for the surface and risk the bends? Not likely….

What To Do with a Wetsuit that Stinks

It couldn't be helped. You've done the deed. Now you're afraid your wetsuit will stink. It certainly will if you do nothing. Unless you have an infection, urine is sterile, but after a while it breaks down into ammonia and your wetsuit will smell like a dead cuttlefish. Here's what to do.

Give it a hot rinse. This is the most important part of regular stink prevention. Walk right past the rinse tank where other divers are busy dunking their suits and go back to your room at the resort or home and rinse it in hot, fresh water. The easiest way to do this is to take your suit in the shower with you. Hot water is better than lukewarm water for breaking down salts from the ocean and from your body.

Hang it. After rinsing, hang your suit to dry on a wide wooden or plastic hanger, preferably one made for wetsuits. Use a wide hanger to keep the front and back of the suit apart so it can dry more quickly.

Soap it. Every once in a while give your suit a soapy bath. Scrub it well inside and out. Use a sponge on the slick neoprene and a soft-bristled brush on any nylon linings. Just about any kind of soap will work to kill the odor, but some are better than others. The best soaps for the job are commercially available "wetsuit shampoos"(check your local dive store) or a gentle baby shampoo. Next best are regular bath soaps and shampoos. Dish and laundry soaps are too harsh to use regularly on your wetsuit, but will do the job in a pinch. *Never* have your suit drycleaned.

Surf Rider Foundation continues assault on feral Sea Stars

by Jill Pearson, Coastal Coordinator NRM South

Over two evenings in late September a band of people rallied together with campaign organisers, Surfrider Foundation, to continue the fight against the Northern Pacific Sea Star at Mays Point, Lauderdale. Not even the threatening weather could turn people away with supporters braving the somewhat cooler conditions on the first evening to enjoy a warm, calm evening with a wonderful sunset by day two. All up the 60 passionate coastcarers removed just over 15,000 of the invasive pests from the inner points.

All of the sea stars were juveniles, measuring less than 10cm in diameter, and many were actively eating the local marine life at the time of their removal. While the pests have not been eradicated from the area, these spring collection efforts have gone a long way towards mitigating the impacts of a full generation of these pests, on the local ecology of inner Mays Point.

Surf Rider Foundation is planning another blitz during the summer king tides and is looking forward to again working with the wider community. Hopefully many more volunteers will join us then, but until summer, many thanks to all who supported this event, including local businesses, industry and residents.

It was a fantastic effort and there was a great atmosphere out on the point. Thanks also to the pod of dolphins that joined us just before sunset on the final night – what a great way to finish the spring campaign!

Contact Jimmy Dell if you'd like to get involved james.t.dell@gmail.com 0427325182. Or visit www.surfrider.org.au to join other stewards of the coast.

Sponges: What is so exciting about them?

by Jane Elek

Every dive I bring home lots of photos of sponges. "Not more sponges" my family groan! Most people find sponges rather boring – they just sit there, don't move or react to anything. But I have always found sponges fascinating – Tasmanian rocky reef are covered with them in all shapes, sizes and colours. In fact they provide most of the colour on our reefs. The same sponge species can be different shapes and colours in different situations. This makes them very hard to identify so most people don't bother. Taxonomists mostly identify them from preserved specimens by dissection and the shape of their spicules (the hard bits inside that act as a skeleton). These specimens are colourless and often shapeless; we all know that sponges lose their colour as soon as they die and get washed up on the beach. However, Edgar and Gowlett-Holmes give some IDs of underwater specimens.

Now I have found a good reason to be interested in sponges. I have just read a fascinating article in *New Scientist* proposing that all complex multicelled animals including us have descended from sponges. Wow!

Most zoologists agree that sponges are the most primitive multicellular animal, but usually they put it on a low branch of the evolutionary tree. Peterson from Dartmouth College in Hanover, New Hampshire, has used DNA analysis to look at our ancestry (they sequenced 7 genes from 42 species) and suggests that sponges may be on the lowest part of the trunk instead of an offshoot. His theory is that a sponge larva (a ball of simple cells) may have refused to settle down onto a rock and learnt to feed itself. This happened when earth was very cold and most of the oceans were frozen. It would have been a great selective advantage to be able to feed and survive for a longer period so that it had a better chance to find a good place to settle. Eventually its offspring may have developed a gut and a mouth and been able to feed on other animals.

So next time you find a humble sponge, give it more respect. Did you ever wonder why they are so brightly coloured, with almost nothing else growing on them? But that is another story!

(Summarised from Holmes, 2009. *New Scientist,* 2 May, 2009, p38-41)

[p.s. Karen Gowlett-Holmes tells me if you put a sponge through a blender then into a bucket it will slowly start to gather the pieces together and reconstitute itself-Ed]

Special Thanks to Jane for scooping the pool for the first person to make a spontaneous unsolicited contribution. Unfortunately, the reward is just a warm fuzzy feeling, but thanks all the same.

Reef Life Survey

Understanding our rocky reefs

by Dr Jemina Stuart-Smith,

South East Australian Reef Biodiversity Assessment project co-ordinator, RLS

Reef Life Survey (RLS) is a volunteer-based marine monitoring program using standardised methods to collect data on marine fishes, invertebrates and benthic habitat. RLS was the initiative of Associate Professor Graham Edgar at the Tasmanian Aquaculture and Fisheries Institute (TAFI), University of Tasmania, with the support of a consortium of marine biodiversity managers from each of the southern Australian states. Seed funding was provided by the Commonwealth Environment Research Facilities (CERF) Program, an Australian Government initiative supporting world class, public good research, and resulted in the formation of the RLS program within the national charity, the People and Parks Foundation (www.peopleandparks.org). The project has built strong partnerships with community-based volunteer programs nationwide with the ambition of maximising collective efforts and common goals for marine conservation, and in the long term, is expected to play a key role in the management and conservation of the world's marine biodiversity and resources.

RLS differs from other volunteer monitoring programs by engaging the most enthusiastic and committed recreational divers and training them to collect species level data for all fishes and invertebrates (>2.5cm) observed along a transect line. Photo-quadrats are also taken along the transect line to record benthic habitat information. Training can be quite intense – the methods are picked up fairly easily, but identification to species level for fish and invertebrates can take a while to learn. Four-day survey and training trips are regularly held around the country, with 2009 alone seeing training trips at Eaglehawk Neck and the Derwent Estuary TAS; Albany Jurien Bay, Rottnest Island and Geographe Bay WA; Sydney Harbour, the Solitary Islands, Botany

Southern Blue Devil (Paraplesiops meleagris) - taken on RLS survey trip South Australia (Photo: R. Stuart-Smith)

Bay, Lord Howe Island, Laurieton, Port Stephens and Jervis Bay NSW; Kangaroo Island SA; Port Phillip Bay VIC; and Norfolk Island, as well as a collaborative survey expedition with the Wildlife Conservation Society (WCS) to Aceh, Indonesia.

Trained volunteers regularly survey in their own time, and contribute their valuable data to an ever-growing database of information that is freely available to the public (for non-profit purposes). Surveying has become the entire purpose of diving for a number of our most enthusiastic divers – with one volunteer conducting over 100 surveys in a year, and a handful of others approaching this number – in itself, clear indication to the support this project has gained. In the relatively short time-frame that RLS has been operating - since December 2007 - over 1000 surveys have been conducted. The keenest RLS divers also often survey while on holiday – and this (along with special survey trips) has resulted in data collected at the international scale already, including surveys Bali and Flores in Indonesia; and a nice trail of sites from Ecuador through the Pacific – including the Galapagos Islands, French Polynesia, and Tonga (see survey map: http://www.reeflifesurvey.com/?page_id=133).

RLS volunteer Margo Smith in school of Trachurus novaezelandiae and Schuettea scalaripinnis, Port Stephens, NSW, May 2009. (Photo: J. Stuart-Smith)

If you would like more information about the program, please visit the website (www.reeflifesurvey.com) or email us directly (reeflife.survey@utas.edu.au).

REDMAP Lives!

To some of you, the name "Redmap" conjures up all kinds of exciting images of tropical marine species wandering into our waters on board the climate change magic carpet. But hopefully this will serve to better educate you….

"REDMAP is a new interactive website aimed at engaging and educating the community about climate change and its impacts on the Tasmanian marine environment".

After a much anticipated wait, http://www.redmap.org.au will soon be up and running and we can't recommend this project highly enough.

If you have sighted something weird and wonderful but didn't know where or how to report it, this is the site for you. The new project will aim to record your sighting information about unfamiliar animals that might be changing their normal range as the waters warm.

The scientists are also interested in other important sightings of rare and unusual things. So if in doubt, report it. Don't let all that valuable information go to waste.

If you have any suggestions or questions you will find Gretta, Rebecca and the rest of the crew very friendly and approachable. No question is too silly.

Have a surf through the site and tell us what you think. We would like to do whatever we can to promote this site and encourage you to report your rare gems of information, so expect us to keep pestering you about this very worthwhile project.

Check it out from 9th December.

redmap
SPOT. LOG. MAP.

www.redmap.org.au

Please be advised that the advertised launch event for 9th December is currently fully booked.

Tech Talk – No Country for Old Tanks

You may have noticed that it's difficult to get an old aluminium tank filled in Tasmania. What's that all about?

Scuba Tasmania, the representative body for scuba diving businesses in Tasmania has decided to stop filling or testing certain tanks made out of an older grade of aluminium which has been the subject of safety concerns in recent years. A Scuba Tasmania release says,

> *Considering legal obligations under the Workplace Health and Safety Act and Regulations to assess and manage risk, a number of Scuba Tasmania members conducted their own risk assessments and came to the conclusion that while the likelihood of explosion was low the outcome was potentially catastrophic, and that the only effective control is to remove the risk factor - to neither test nor fill the tanks deemed to be at higher risk of explosion.*
>
> *Informal discussions indicated that the majority of members had individually implemented that approach, however a motion was formally put to and passed by all but two members that they not fill or test cylinders that have been identified as being at high risk of catastrophic explosion including Luxfer aluminium alloy cylinders manufactured between 1972 and 1988, and CIG (Australia) aluminium alloy manufactured in or before 1990.*
>
> *Some Scuba Tasmania charter operators have stated that cylinders deemed at risk will not be permitted on board their vessels and divers should check this when booking dives.*

The move has been prompted by a very nasty accident in South West Rocks when a tank filler had his hand severed by an exploding, in test, tank. In about 1992 it became evident ridges formed in the necks of the old tanks as they were made could develop into cracks. Until 2002, Luxfer recalled any of their cylinders that developed neck cracks. The ones left must undergo the most rigorous annual testing procedure.

Although the risk of a catastrophic failure of this kind would appear to be low, most shop owners, with the exception of Aqua Scuba have decided not to take the risk. Ian Cooksey of Aqua Scuba has stated that,

I feel that as long as the cylinder is tested by qualified and experienced testers, following the correct procedures, using the correct equipment and filled to the correct pressure at the correct rate that these cylinders are at no greater risk of explosion than any other brand. We have recently had extensive discussions and inspections with Workplace Safety and have been found to be dealing with these cylinders correctly. Therefore, until directed by Work Place Safety, Australian Standards or Luxfer, we will continue to fill and test these cylinders as we have done for many years.

And contrary to one comment I heard around the traps, Ian does fill the old cylinders himself personally, not just his employees.

At the present time there is no workplace Health and Safety notice which would require divers to condemn their old tanks, although a Queensland WH&S warning has been issued suggesting more thorough annual inspections of tanks of that era. However, many are already replacing their tanks to avoid the fill problems the new ruling creates.

Those were the days

John Smith was taking note last edition and emailed me to offer up this gem to the editor's newly started collection of old dive gear, a Snark III twin hose regulator with spares. Snark's were very common regs of the 1960s and 70s and TSDC life member Darryl King still swears the Snark II was the best reg ever made. He spent the entire 1980s earbashing me about it. Well I've got something better than that now Darryl. The later version! Thanks to John for responding.

If you have a weird and wonderful set of pre-1980s gear send in a photo. I might even buy it if it tickles my fancy and you want to sell. I'm warning you though, I'm cheap [Mike].

If you have a photo of your favourite old longboard, collapsible canoe, or other marine novelty. Please share it with us.

My Compact Camera

These are a couple of sea hares, *Aplysia Parvula* I believe, from the collection of Emma Flukes. The sea hare is very common in south-eastern Australia and normally has many colours depending on what its eating, in this case red algae probably. Emma slipped it in all modest-like, but I think its a great shot with the texture and 'presence' of the beasties shining through.

Slug love?

Photographic Exhibition

The Waterfront Café Dunalley has been recently refurbished and will now be featuring regular exhibitions by Tasmanian artists. The first will be entitled "Lady Marion" and will feature photographs by Duncan Giblin. The shots focus on the Dunalley and Marion Bay region and will be on display until 15th January.

North Western News – Leven Scuba Club has new boat!

This is the "Garry McKercher" the Leven Scuba Clubs dive boat. It's a 4.7M Quicksilver inflatable with a 40 HP motor. Still needs some work to be done on it and the trailer but if there's no more dramas (and they have had a few) Leven Scuba Club should be in the water in time for summer. The club battled through a number of fundraising projects and squirreled away enough with some help from Sport and Recreation.

I hope this leads to some heavy duty diving activity on the Reef Balls, Horseshoe Reef, Three Sisters, Pt Sorell and the many other excellent dive sites in the area. If you are interested in diving up the North West, drop us a line and we will put you in touch with the local fonts of knowledge.

[The boat is named in honour of a valued club member who died recently in a freak accident. I'm sure he would be proud to see a boat that bears his name bring so much enjoyment to the divers of Devonport – Ed]

Critter Files

Southern bobtail squid, Southern dumpling squid (*Euprymna tasmanica*)

Habitat: sheltered and moderately exposed sand, seagrass
Depth range: 0-15 m
Size: mantle length to 40 mm
Diet: small invertebrates and fish

The southern bobtail squid commonly occurs in sheltered bays and estuaries but remains under sand in a mucous-lined sediment coat during the day and is generally only seen by divers at night. Its body has an iridescent green-yellow colouration and a covering of black spots. They have a number of tricks to evade predators (or overly intrusive divers!), including quickly burying themselves in sand, dumping a blob of ink as a decoy and then jetting away, and rapidly shedding their sediment coat through the use of acid glands. Commonly called "jewels of the sea", these little guys have a light organ fuelled by symbiotic bioluminescent bacteria which is used to cancel out their silhouette for predator evasion, but also doubles as a wonderful light show for divers at night.

Photo © James Peake. More great images at http://www.redbubble.com/people/jimswims

Translocating rock lobsters to increase fisheries yield?

Emma's interpretation of Gardener and Van Putten's (2008) paper entitled 'The economic feasibility of translocating rock lobsters to increase yield' *with less of the jargon…*

As most of you are probably aware, the southern rock lobster that we all know and love/eat is a hugely important component of Tasmania's fishery. Commercial catches fetch more than $50 million (beach price) every year, and the fishery's continued sustainability relies on stringent management practices. In 1998, the rock lobster quota system was introduced. This resulted in successful rebuilding of many regional stocks. However, some areas remained depleted due to the uneven distribution of lobsters around Tasmania's coastline. As a result of unequal fishing effort across the state and patchiness in habitat suitability, both the distribution and growth rates of Tasmanian rock lobsters are highly variable. Therefore, the current statewide uniform management approach tends to result in suboptimal catch rates.

The Theory

Caleb Gardener and Ingrid Van Putten from TAFI examined the feasibility of collecting rock lobsters from around Tasmania and relocating them to more profitable areas. The theory is that by sending rock lobsters on a vacation to new waters, overall profits for the fishery can be increased. Long-range translocation from slow-growth areas to higher-growth areas around the state means lobsters can grow quicker, grow larger, and reproduce more frequently (in other words, easier to fill quotas!). Shorter translocations from deeper waters to shallower inshore waters can also increase the value of individual lobsters for two reasons: shallow-water animals have higher rates of survival in live shipments overseas, and their deep red colour is preferred by the large Asian market. But of course, if you call yourself a fisherman you'd already know all this…

How it works

In order to relocate our 10-legged friends to better waters, we need some way to transport them. The two most feasible options are by use of dedicated charter vessels, or by fishers retaining their undersized catch and releasing them on their return trip home. The overall benefit to the fishery will be the sum of increased revenues generated by translocation minus the costs associated with the translocation.

Tasmanian rock lobster fishers can lease quota to or from other quota-holders at a price of around $16 per kg. So for translocation to be a better option for fisherman than leasing of quota, the overall costs of relocation need to be *less* than $16 per kilo of additional catch generated. It's all simple maths. So, what did they find?

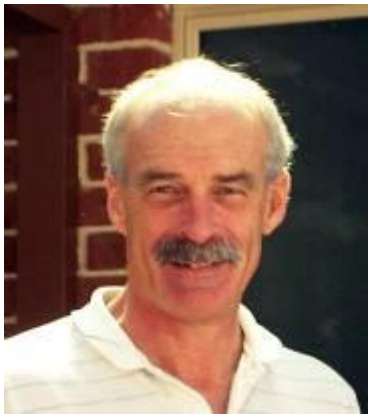
The magical solution …

After skipping over the extensive and complex economic modelling stuff, translocation by fishermen was found to be significantly cheaper than by use of charter vessels. However, the estimated benefit to Tasmania would also be lower because fishers are unable to translocate between sites that are separated by large distances (there's not too many fishing boats regularly trundling between Maatsuyker and King Island). Short-range translocations from deep to shallow waters were not economically viable because the gains in quality were trivial, and the bulk of the economic benefit occurred through increased catches resulting from long-range translocation.

Overall, the greatest net benefit to the state will be through long distance translocations by charter vessels. At a cost of less than $3 per kg gain in catch, this is a much better option for fishers than leasing quotas. And with a projection of $169,000 gain to the fishery for every 5 tonnes of translocated lobsters, the concept looks very promising. Perhaps crustacean vacations are the way of the future for the Tasmanian rock lobster fishery?

Some of our favourites from your portfolio

Presenting John Smith



John is happy to plug along the bottom with no special needs or cares. He is enjoying retirement and forever curious about what he sees. He has no extra-fancy camera gear or special objectives, but I can see he is a reflective man who was long ago seduced by the ocean's power.

John recently left the Air Force to "do the grey nomad thing" with his wife, before they were both transfixed by the majesty of Bicheno and decided to stay put forever.

The thought that his photos might be artful leaves this modest man confused and amused. He is just enjoying himself, but the snapshots show that he is seeking to capture a moment that says something about the character of man and marine life.

He's also cottoned onto Seadragons and doesn't want any special fuss made about his fascination, but he has observed them closely and wants to learn more. Help him if you can.

John doesn't want any BS written about him, so we will step aside and let the images speak…

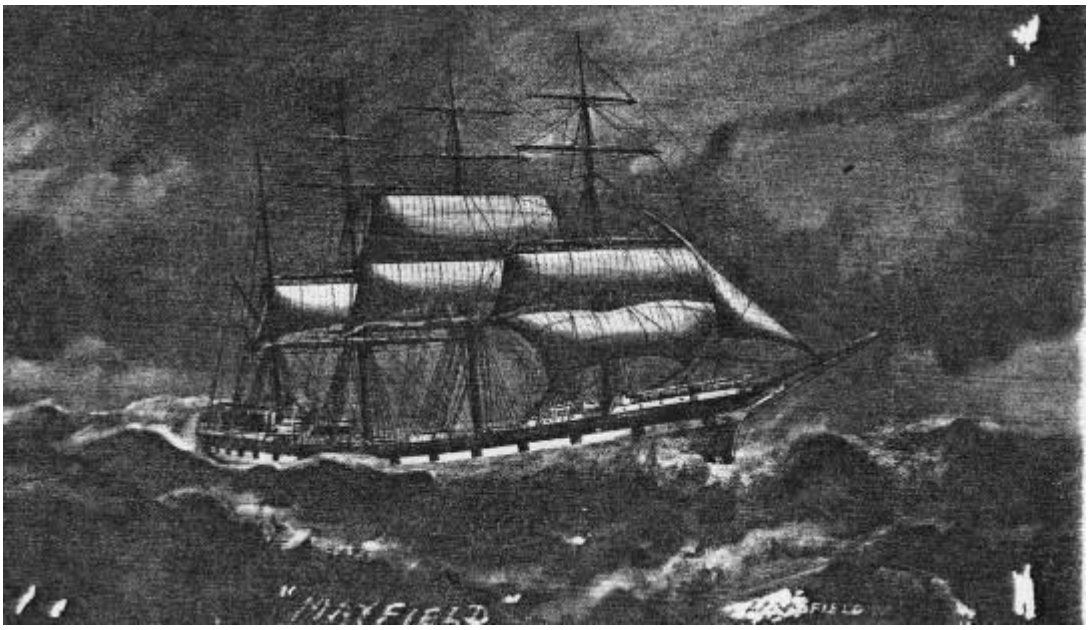
Maritime History

The Mighty Mayfield

The largest sailing shipwreck in Tasmania is also the only four masted barque wrecked in Tasmania.

She was a twelve year old ship registered in Glasgow, but in good condition. Despite the strong competition from steamers that had already seen most sailing ships go to the breakers, the "Mayfield" had survived by using new labour saving technology and by taking contracts in the wheat trade, where cheap freight charges were more important than a quick voyage.

In February 1905, the 2176 ton barque left Geelong loaded with 3579 tons of wheat and spent the night in the shelter of Port Phillip. Next morning a steam tug came alongside and she was towed out into Bass Strait. Soon the "Mayfield" was pounding through a heavy thunderstorm.



The ship made for Banks Strait, then a popular short cut for large vessels looking for favourable winds to get to Sydney. The captain was using the Swan Island light as a guide. Running through an apparently safe path near the lighthouse, the Mayfield was riding the troughs of a heavy sea. On one downthrust she bumped, on the next wave she hit the top of a submerged rock and the plates could be heard ripping under the strain. The barque kept on sailing unharmed and eight minutes later the carpenter came on deck and reported that the holds were still dry.

The captain ordered the man at the wheel to steer for Swan Island light and went below to check the chart. By the time he came back on the deck the ship's rigging was rattling as she groaned under the weight of four feet of water in the hold. The damaged plates had opened and she was sinking fast. A few minutes later the carpenter reported 6 feet of water in the hold.

The captain decided that at this rate she would founder in a few minutes. He ordered the helmsman to make for the beach on Swan Island. The sailor shouted back that she was so heavy that she ship had no steerage way. Then, frighteningly, the Mayfield heeled over to port and threatened to capsize. She righted and then quickly sank to the bottom, fortunately in only 12 metres of water. Most of the rigging was still exposed above water.

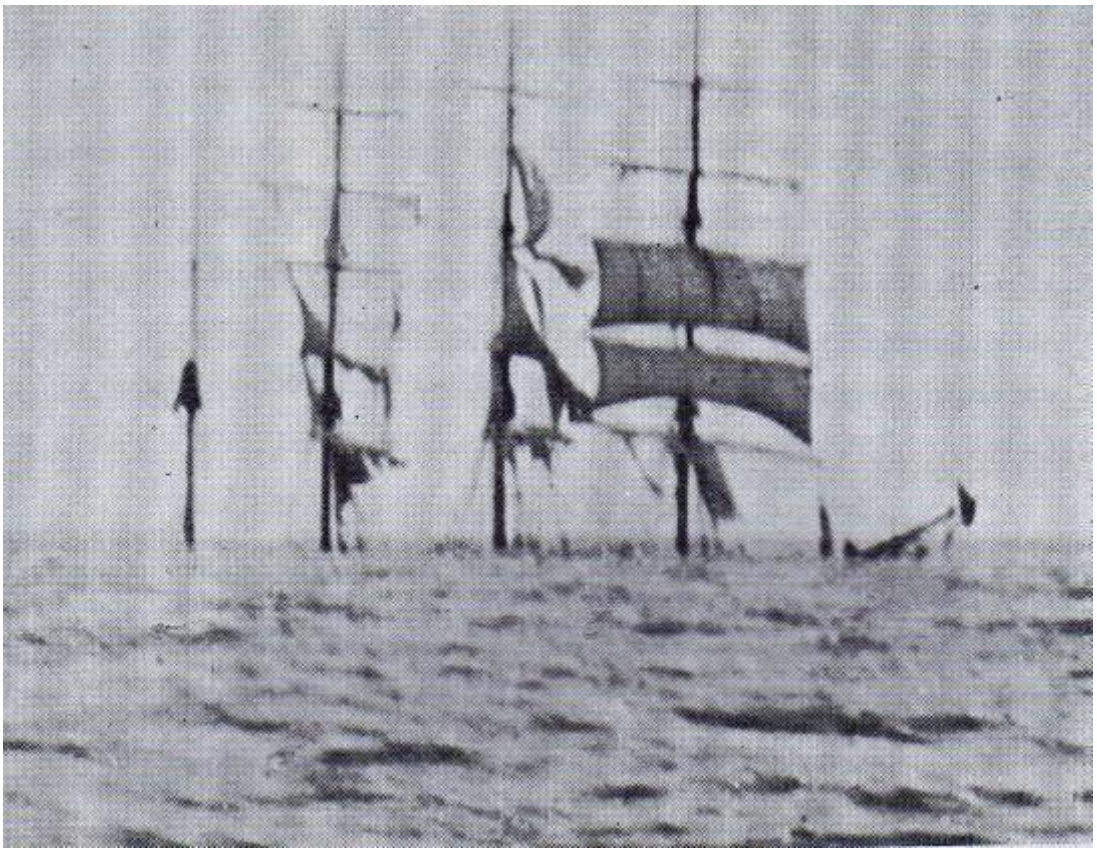
Three lifeboats were smashed to pieces in the sea, but one managed to get off the deck with most of the crew. The others were rescued later. The crew were taken to Launceston where the Harbour Master used his fund for distressed seaman to fit them out and send them on their way to Melbourne. Insurance payouts covered their wages.

At the Court of Admiralty the Captain denied hitting Harry's Rocks off the NE side of Little Swan, and the crew's accounts were all consistent that they had seen no surf on any rocks when she hit. A local skipper testified that Harry's Rocks never broke even in a heavy sea. All agreed that she struck four miles from the light, which fitted the location of the submerged reef. In the end it was decided to give the captain the benefit of the doubt and he wasn't punished.

The wreck was offered for sale, but didn't fetch much as everyone knew the wheat would soon be waterlogged and then it would swell and break open the hull.

The "Mayfield" didn't break up straight away and her intact hull and rigging became a local landmark for a time. The mainmasts were up and the jib boom was still 6 feet out of the water at high tide four months later. Some time passed before she was destroyed by storms.

I have dived the wreck and she is heavily broken up on a reef in relatively shallow water. The area is tide swept and dangerous and is best dived at low water slack.



WHATS ON in December 2009

Like to get in touch with someone for a dive, canoe or day out? Email us and we'll forward your message.

Research, Community and Education

Wednesday 9th Dec

The REDMAP website will be active (see earlier report in this edition for more details), check it out online at www.redmap.org.au

Coastcare

(sorry RSVP dates have already passed for some events)

Saturday 5th Dec - Coastcare stall at Salamanca Market

Raising awareness of coastal issues, promoting Coastcare activities and reaching new audiences. Oliver Strutt 0407 784 945

Saturday 5th Dec – Water quality monitoring training workshop

For Coastcare volunteers and any other interested people. 10 am Blue Lagoon, Dodges Ferry. RSVPs please by 1st December, Sally Johns Ph 0410 057 457

Tuesday 8th December - Thankyou function for Huon Valley Coastcare Groups

Launch the 2010 HVC Land and Coastcare Calendar and thank volunteers for their efforts during the year. A speaker will also discuss local coastal erosion. 6pm Huon Valley Council Chambers, Huonville, Pip Gowen Ph 0427 648 463 or Holly Hansen Ph 62640357

Friday 11th December - SCAT Water Quality projects Bus Tour

The free tour will visit Oyster Cove, Roaring Beach Lagoon (near Dover) and North West Bay where Coastcare groups will showcase their water quality improvement activities. This is an opportunity for other Coastcarers to learn from these projects and share information.
Bus leaves Hobart at 9.30am and will return by 4pm, Oliver Strutt 0407 784 945

Friday 11th December, "A Coastcare Christmas"

The Bridport Coastcare Group will celebrate this years Coastcare achievements with a BBQ and presentation of small prizes to members at this fun event.
6pm Bridport, Jay Wilson, Ph 6352 6537

Saturday 12th December - Supper and Penguin Viewing at Grassy – King Island

PWS will host an interpretive talk about the little penguin and shearwater colonies at Grassy. The talk will be followed by a free supper. Meet at Penguin Rookery, Jetty Point Grassy
Shelley Davison, Ph 0438 036 899

Saturday 12th December - Coastal Celebration Family Fun Day

Sand sculpture competition, games, BBQ and thank you event for people who helped with Sea star clean ups in Lauderdale and Coastcare activities everywhere.
Lauderdale Beach at the end of the Canal 11am – 2pm, Oliver Strutt, 0407 784 945

Saturday 12th December - Sisters Beach Environment Team Celebration

Volunteers will hold their last working bee of 2009 and then hold a BBQ to celebrate the achievements of the year.Richard Muir Wilson Ph 6443 8363

Sunday 13th December - Caring for Currie Coast

The King Island Field Naturalists Club will be holding a rubbish and weed removal event on the foreshore followed by a celebratory BBQ. 2pm Lions Park, Currie Wharf King Island
Carmen Holloway, King Island Field Naturalists Club Ph 6461 1248
Carmen_james@bigpond.com

Sunday 13th December - Sharing the Shoreline Field Tour

A free tour for members of the wider community down the D'Entrecasteaux Channel and over Bruny Island to explore a range of coastal sites and learn about different coastal and marine threats and values. Lunch and snack are provided. 8.50am departure Australian Antarctic Division Car Park, Kingston.
Jill Pearson Ph: 6221 6126, jpearson@nrmsouth.org.au

Sunday 13th December - Rosny Montague Bay Landcare/Coastcare Annual get-together

This local group will be celebrating their achievements with a BBQ and presentation of certificates of appreciation to members at Rosny, Jan Counsell Ph 6244 1566

Sunday 13th December – Wildcare thankyou BBQ

Wildcare Deslacs will be hosting a thankyou BBQ for the volunteers who have contributed to the groups success throughout 2009 and also promoting their activities in 2010. All are welcome to attend. 12 noon Clifton Beach Park, Clifton Beach
Ian Mace Ph 0427 880 547

Sunday 13th December

7 Coastcare Groups from across the Tasman Peninsula will meet with each other and reps from Tasman Council to discuss their projects and celebrate the achievements of the year. Educational materials will be distributed. 12.30pm Koonya Hall, Andrew Drenen Ph 6250 9221

Saturday 19th December - Granville Harbour Coastcare

West Coast Council will be holding a BBQ on the Granville Harbour foreshore to encourage locals to form a Coastcare Group to take on sea spurge control.
12.30pm Granville Harbour Foreshore, Marty Bower Ph 0413 505 050

Major biological events and Sighting Reports

The whale migration is virtually over with most already on their way to Antarctica. Although only a few weeks ago one whale snagged in a fishing net was reported off Wedge Island. TSDC divers in Fortescue were recently eyeballed by a Southern Right Whale for some time.

No its not oil contamination, it's the time for slime, with the bays and rivers sporting slicks of dead and decomposing salps, fish eggs and other plankton apparently blown inshore into large drifts.

Great clouds of mutton birds have arrived down the east coast of Australia after their long migration from the Bering Sea. The condition of these animals is often poor and many have washed up dead on local beaches after the draining flight. Diebacks of this kind are common and it will be interesting to know if this is more than usual. After their long flight the birds go back to the same burrow with the same partner and all lay within a day or two of the 23rd November.

TSAC report sightings of Prowfish and Velvetfish at Spring Beach. Normally rarely seen, these were spotted on one dive by a member who has only been diving for a year.

Amalgamated club calendars

Like to get in touch with someone for a dive, canoe 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

6th December – Dunalley Canal drift dive, Tas Uni Dive Club (TUDC)

11th December - Tinderbox Dive and Xmas party, Tas Sub Aqua Club (TSAC)

12/13 December – Betsey Wrecks TSDC

20th December – Tinderbox Dive and Xmas party, TSDC for lunch and TUDC for dinner!

East Coast

5 December – Isle de Phoques TSDC

27th December – Maria Island, TUDC

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

North West and West

Wynyard Dive Centre

Leven Scuba Club may also have ad hoc dives planned

North
1st December ODP Meeting – Newstead Hotel
Sunday, December 13th - Club Xmas BBQ at George Town Yacht Club and Dive at Farewell Beacon - High Tide 9.01am

Plus various night dives at Kelso, The Monument and Fish Beacon during the various months. Keep and eye on the Ocean Divers web site or the Go Dive Launceston Dive Board.

Canoeing

Check with Ian at Aqua Scuba for upcoming events with Southern Paddlers

Surfriding

Mays Point sea star clean-up (see article in this edition for more details)

Exhibitons

To 15th January - Duncan Giblin's nature photographs of Marion Bay and Dunalley

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

Divers are reporting as low as 14 degrees in southern rivers and 17 degree in Bass Strait.

Underwater Visibility recently

Tamar- still slightly dark on the surface but quickly giving way to 15-20M visibility on the Monument.

NW Coast, Bicheno – reports of 15-20 Metres

Derwent – still a bit green, but 5-10 metres in the lower reaches around South Arm and the Alum Cliffs.

Best bets – improving everywhere, but still only average close to major freshwater outflows after wind or rain.

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

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, 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.