

redmap

SPOT. LOG. MAP.



WELCOME

Welcome to our very first edition of Redmap News! We have had a fantastic response to the website. A stack of sightings and some great photos have been submitted, and there have been almost 6000 hits on the site (from 79 countries!).

The Redmap project was initiated through a grant from the Tasmanian Community Fund and is generously sponsored by Mures and Anaconda. We have also been very lucky to have received input from many different scientists and community groups. We wish to thank these individuals and organisations that have helped to make Redmap such a success. Thank you also to all our members for signing up, and a big thanks to our members who have logged sightings on the website.

Remember, you don't need to do extra fishing or diving for Redmap – just log a sighting if you spot something out of its usual range. If you don't spot anything unusual, you can still be an ENORMOUS help by making sure you tell people all about us! The success of Redmap depends on people being aware that they have the opportunity to SPOT, LOG and MAP unusual marine critters, so forward this newsletter or details of our site to people you know who care about Tassie's great marine environments. Your contribution will help us develop a picture of how marine species might be changing their distributions in Tasmania (and maybe win you some great prizes; see page 3!)

Ionata (our web development team) is currently working on several improvements to the site, including the ability for you to add captions to the photos you post on the site and a log of 'latest sightings' that includes those extra special critters not yet on the 'Redmap list' (such as turtles – see page 6). We're expecting to launch some of these site updates later in March and we'll keep you posted as new features become available.

Happy fishing, boating and diving.

The Redmap Team



If you have any comments, suggestions or questions about Redmap, please email us:
enquiries@redmap.org.au

Remember, we're new and we'd love to receive your feedback!

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Latest cool sighting



Yellowtail kingfish

This school of 30–40 kingfish was spotted in the Derwent last month by Adriaan van Huissteden.



THE TASMANIAN COMMUNITY FUND

Redmap was established through funding from the Tasmanian Community Fund (TCF) – without TCF, Redmap wouldn't exist!

The TCF was established in 2000, following the sale of the Trust Bank, to provide grants to community organisations. Since then, it has allocated around \$48 million to almost 1300 projects in all areas of the state. The TCF has supported a very broad range of projects including suicide prevention programs, first aid equipment, uniforms for community bands, upgrades to community halls and facilities, and restoration of heritage buildings. The fund supports projects which provide a strong benefit to the community, are able to demonstrate good community support, show excellent value for money, and look to address a real need in an

innovative manner. The Redmap project met each of these criteria (hooray!).

Applications for funding are received in two general grant rounds each year, and in special targeted funding rounds from time to time. The next funding round will open on 13 February and close on 24 March, so if you've got a great idea for a community project, why not apply? Funding rounds are highly competitive, and potential applicants are encouraged to discuss their project with TCF staff before submitting an application.

More information on the Tasmanian Community Fund is available on their website at www.tascomfund.org, or by contacting their office:

admin@tascomfund.org on 6233 2800.



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NATIONAL REDMAP

We've been getting lots of enquiries from community groups and other research institutes about extending Redmap to other states of Australia and even considerable interest from Indonesia! We are now developing Redmap as a national project, and want to garner interest from as many industry, research and community groups as possible and involve them in the development of the national project. Lots of our members are from interstate – so if you are from a mainland research institute or community organisation and want to see Redmap up and running in your home state, send us an email at enquiries@redmap.org.au; it would be great to have you involved!



Grey morwong spotted by Tim Alexander off Bicheno.

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AND THE WINNERS ARE...



Doug, winner of our January Mures voucher.



Tom, winner of our February Mures voucher.

*Each month **Mures Fishing** has very kindly donated a \$50 voucher for you to win! You can use your Mures voucher on anything in the lower deck – fresh fish to cook at home, toys and goodies in the shop, a meal in the Bistro or a yummy snack in the Polar Parlour.*



Congratulations to Doug on being our first winner of the monthly prize draw for a \$50 voucher from Mures Fishing!

Doug is a recreational sea fisher and fishes Norfolk Bay as well as the Maria Island – Hell-fire Bluff area. He often goes fishing with his family and mates. Doug and his wife have a

shack and boat shed at Sommers Bay, where Doug hand fishes from a small five-metre aluminium 'tinny'. For the past 10 years Doug has coordinated a fishing competition at Sommers Bay to raise funds for the Sommers Bay Jetty Association (Inc). These funds (as well as a Commonwealth grant) have been used to refurbish the Sommers Bay jetty and pontoon at a cost of \$28,000.

And congratulations to our February winner, Tom. See below right for a picture of Tom doing two of his favourite things at once – reading and fishing! Tom enjoys going fishing with his family, especially fishing for squid in the Bruny Island and Tasman Peninsula areas during the summer. On his family's first squid fishing adventure Tom very quickly learned not to get too close to his catch until after it had shot its ink – Tom ended up with a salty, oily, black face.

MORE FANTASTIC PRIZES!

The success of Redmap depends on fishers, divers and the general community being aware that there is a website where they can log sightings of marine species that are unusual in Tassie!

The success of Redmap depends on fishers, divers and the general community being aware that they can log sightings of marine species that are unusual in Tassie! So, we launched a very special competition where you can win some BIG prizes for helping us get the word out there.

Anaconda kindly donated **TWO \$400 vouchers** that can be spent on the winners' choice of Anaconda exclusive products! On our registration page there is a little box that says 'who suggested you sign up for the Redmap newsletter?' Each time someone puts YOUR name in there, you go into the Anaconda prize draw. We have a winner for the February prize – Carl Hyland – but you still have a chance for the March draw. New



members go into the March draw, as well as the current members who suggest they sign up. So tell your mates about Redmap and you can win – too easy!



REEF LIFE SURVEY

Reef Life Survey (RLS) is one of the 'project partners' for Redmap. To tell us what RLS is all about, we asked the RLS coordinator Jemina Stuart-Smith:

Reef Life Survey (RLS) is a marine monitoring program where trained volunteer divers use standardised methods to collect data on marine fishes, invertebrates and benthic habitat. RLS data automatically gets logged as Redmap data through the Tasmanian Aquaculture and Fisheries Institute (TAFI) database, and we are in the process of modifying the Redmap website to display this survey data (along with other survey data) separately from the community sightings.

RLS was the initiative of Associate Professor Graham Edgar at 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 and the program has built strong partnerships with community-based volunteer programs nationwide with the ambition of maximising collective efforts and common goals for marine conservation.

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 (>2.5 cm) observed during a survey. Photos are also taken to record benthic habitat information. In 2009 alone, training trips were held in Eaglehawk Neck and the Derwent Estuary, Tas; Albany, Jurien Bay, Rottnest Island and Geographe Bay, WA; Sydney Harbour, the Solitary Islands, Botany 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. The keenest RLS divers often survey while on holiday – and this (along with special survey trips) has resulted in data collected at the international scale (see survey map:



www.reeflifesurvey.com/?page_id=133). The RLS program is highly supportive of Redmap, and the additional trained eyes in the water along the SE Australian coast places RLS in a great position to be able to contribute to the growing Redmap database. RLS divers are informed of the need to document unusual species, and as part of their surveys they take photos of unusual or unknown species for identification. These records can be invaluable for following changes in species ranges, and in the long term will provide many sightings of species that may not have otherwise been observed by recreational or commercial fishers. The recreational dive community represents a particular and equally important component in the success of Redmap, and RLS provides a formal way that committed divers can contribute to both conservation management and a greater scientific understanding of how the changing ocean climate is influencing what they go diving to see.

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



Blue groper (*Achoerodus viridis*) photographed on RLS dive.



'RLS provides a formal way that committed divers can contribute to ... conservation management and ... greater scientific understanding ...'

MEMBER PROFILE – EMMA FLUKES



Emma is a super-keen diver, underwater photographer and member of Redmap, who has logged plenty of sightings on the site. We asked Emma to send us a few words about one of her sightings:

I've learned very quickly that identifying fish when diving in Tassie is a lot simpler than you'd expect – there's not too many to choose from! So whenever I come across something I don't recognise, I always try to snap a picture in case it turns out to be something unusual. My picture of an old wife (below) was taken on the outside of Governor Island, Bicheno. We were just on the way up the kelp slope from what had been a horribly ordinary dive with awful visibility and relentless swell when I came across a pair of these delicate fish. Being a bit of a fish nerd and having never seen these fish before, I was pretty excited! Unfortunately this photo turned out horribly with all the particles in the water, but it was just enough to record the species.

I think Redmap is a great way for marine enthusiasts to band together to be the eyes in and out of the water. And the prospect of being able to make important contributions to the world of science just by going diving or fishing has a lot of people keenly reading up on their fish IDs. It's always nice to go diving with a purpose, and what better personal challenge than trying to spot and record all the Redmap species!



Above: Emma, camera in hand.
Right: Emma's photograph of an old wife.

'I've learned very quickly that identifying fish when diving in Tassie is a lot simpler than you'd expect ...'



MARINE TURTLES

Redmap has received several reported sightings of marine turtles. Belinda Bauer from the Tasmanian Museum, has a special interest in turtles. Here is what Belinda had to say about marine turtles in Tassie:

Leatherbacks are known to make regular seasonal feeding excursions into Tasmanian waters. Loggerheads, green turtles and hawksbill turtles are recorded as occasional visitors to Tasmania (loggerheads are the most common) and are usually associated with the seasonal impact of the East Australia Current or the Leeuwin Current. Quite recently we recorded the first verified sightings of the tropical Olive Ridley turtle in Tasmania and this may reflect an extension in the known range of this species as a result of climate change. It also appears that there has been a general increase of all marine turtle occurrences around Tasmania.

The difficulty with marine turtle observations is that while it is easy to identify leatherbacks, the hard-shelled species (loggerheads, greens, hawksbills and Olive Ridelys) can be difficult to distinguish and often get mixed up

– so a photo would be fantastic! This means we have few verified observations or specimens from Tasmania to give us a really good picture of which hard-shelled species are most common here.

Projects like Redmap provide an really exciting opportunity to help add to our understanding of marine turtle distribution around Tasmania.



Above: Belinda Bauer at work measuring a beaked whale.



Left: Green Turtle (*Chelonia mydas*). Photo courtesy of Rick Stuart-Smith.

‘Projects like Redmap provide a really exciting opportunity to help add to our understanding of marine turtle distribution around Tasmania.’

RECENT LOGGED SIGHTINGS



North

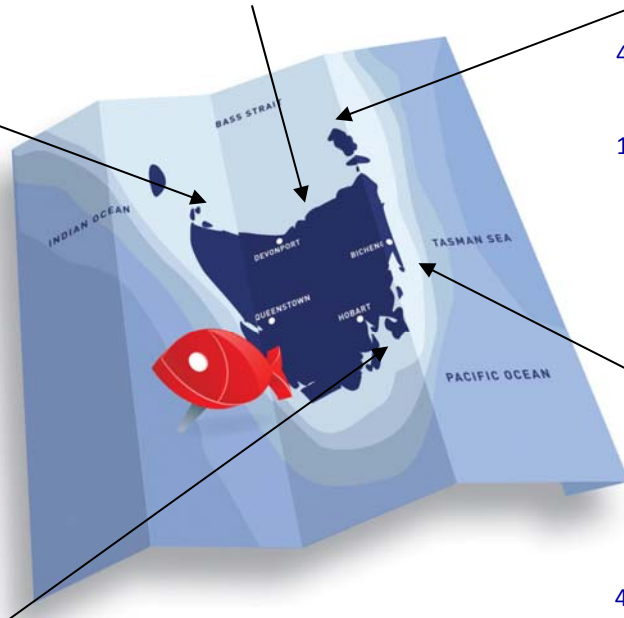
North-west

-  1 x Yellowtail kingfish
-  1 x Leatherback turtle

1 x Mako shark

North-east

-  4 x Eastern rock lobster
-  1 x Old wife



South

-  5 x Herring cale
-  1 x Onespot puller
-  1 x Tailor
-  6 x Yellowtail kingfish (incl. school of 30–40 fish!)
-  1 x Zebrafish
-  1 x Halfbanded seaperch
-  1 x Luderick
-  1 x Leatherback turtle

East

-  4 x Eastern rock lobster
-  3 x Old wife
-  1 x Maori wrasse
-  1 x Tailor
-  1 x Onespot puller
-  1 x Mado
-  1 x Zebrafish
-  1 x Halfbanded seaperch
-  2 x Yellowtail kingfish
-  1 x Luderick
-  1 x Thresher shark,
-  1 x Spotted handfish



Thanks to all our members who logged these sightings. There are some great photos attached to several of these sightings. Check out the photo gallery on the website:
www.redmap.org.au/gallery



This ribbonfish was spotted in southern Tas by one of our members. To register your sighting, please visit the Redmap website at www.redmap.org.au or contact the Redmap Team on (03) 6227 7277 or email enquiries@redmap.org.au

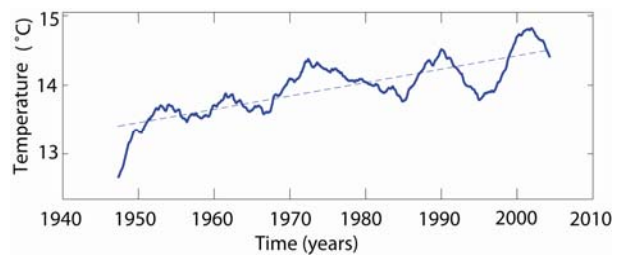


Redmap was officially launched at Mures Lowerdeck on 9 December 2009 by the Honorable David Llewellyn. Above: Hon David Llewellyn (right) and TAFI Director Colin Buxton at the launch.

TEMPERATURE CHANGES

Redmap is interested in how our marine ecosystems might be changing as our waters off the coast warm up. So, just how much is the temperature changing?

Temperature monitoring of coastal waters at Maria Island, Tasmania, has recorded a warming of over 2°C in 62 years. This is more than three times the global average warming rate and is linked to a strengthening of the warm East Australian Current. Global models predict this warming will continue with the greatest warming in the southern hemisphere occurring in the Tasman Sea. The east coast of Tasmania is expected to provide an early warning signal for likely impacts on our marine resources. The 'double-whammy' of warming temperatures and increased transport by the East Australia Current may bring many more mainland species to Tasmanian waters in the near future. This could have vast implications for local ecosystems and economies.



Sea surface temperatures at Maria Island for 60 years showing the upward trend of sea temperatures (Hill, K. L., S. R. Rintoul, R. Coleman, and K. R. Ridgway (2008). Wind forced low frequency variability of the East Australia Current, *Geophysical Research Letters* 35, L08602, doi:10.1029/2007GL032912).

In the next issue of Redmap News:

- Find out how species respond when the water warms up.
- About ArgoSearch
- Find out the March winner of the Anaconda voucher.
- Redmap Q&A

Want even more information on Tasmania's marine life? Check out <http://www.tudc.org.au/news/marinelifelife.php>

Thanks to our sponsors:



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A FEW INTERESTING FACTS

- Did you know that the oceans are the earth's main buffer to climate change, absorbing 80% of heat and 50% of carbon emitted?
- According to the US Geological Survey, there are over 1,386,000,000 cubic kilometres of water on the planet. A cubic kilometre is the volume of a cube measuring one kilometre on each side. Almost all of this vast volume of water is in the ocean. That's equivalent to 9,672,460,000,000,000,000 cartons of milk!
- The average depth of the ocean is about 4267 metres. The deepest part of the ocean is called the Challenger Deep (approx 11,030 m deep) in the western Pacific Ocean, several hundred kilometres southwest of the US territorial island of Guam. Even more interesting – there have been many more visits by people to the moon than there have been to the deepest parts of the ocean!