

# redmap

SPOT. LOG. MAP.



## WELCOME

Winter is here and we are interested to see if some species that have been spotted in the warmer months are overwintering in our waters now. So if you're out on or in the water during the winter months and spot something unusual, please log it on the REDMAP website.

We recently submitted a grant application in the DCC and FRDC National Adaptation Research Priorities Funding round to expand Redmap along the entire Australian coastline. This application involved almost 30 scientists and resource managers from 15 organisations across the country and had the support of many NGOs, museums and industry and community groups.

If you'd like a two-page summary sheet of the species listed on our site, you can now download one from the Redmap site: [www.redmap.org.au/news/](http://www.redmap.org.au/news/) If you print it off as a double-sided sheet and laminate it, you'll have a useful (and waterproof) reference guide for the boat!

And whilst on the subject of the Redmap site, we are almost ready to launch some site upgrades, such as the addition of a comments field next to the photo upload – so you can add captions to your photos. We'll keep you posted.

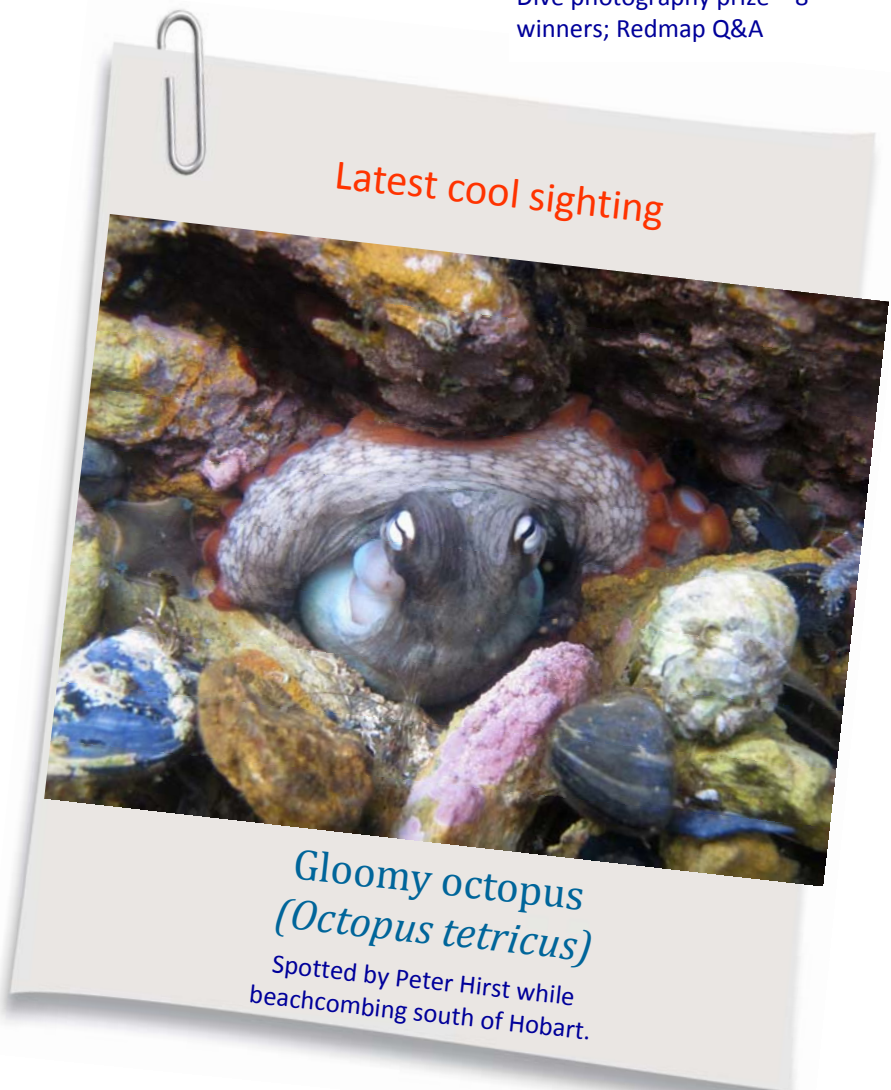


Happy fishing, boating and diving.

The Redmap Team

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

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



## REDMAP IN THE CLASSROOM

*The teaching resources section on the REDMAP site provides some interesting worksheets and lesson ideas to help inspire primary and secondary school students. In putting together these materials, we received some very valuable feedback from local teachers. Congratulations to Wendy Forsythe who is the winner of the prize drawn from our list of secondary school teachers supporting REDMAP – Wendy's school (St Mary's College) received \$300 to spend on science equipment or a school science excursion.*



*The prize drawn from our list of primary school teachers supporting REDMAP is was won by Trish Knight from the Hutchins School. Trish receives a \$400 voucher generously donated by **Windmill Education** to spend on educational equipment for the classroom.*



Girls in the Grade 10 Extended Science class at St Mary's College in Hobart are currently undertaking a research project and groups looking at studying the effects of climate change on the marine environment are making use of the resources available on the Redmap website. The REDMAP prize money was used to fund a snorkelling excursion at Crayfish Point which allowed the girls to experience the marine environment first hand. This was followed up by a visit to the class by Kevin Redd (a PhD student at UTAS) who spoke to the girls about his research project and others that were being carried out at UTAS. Kerry Hennessy, who teaches the class, said that he was really excited about the interest that the girls were showing in the potential effects of climate change on local industries such as the rock lobster fishery and also on their local marine environment in general.



Trish has worked in a variety of schools in Tasmania and overseas. She believes in life-long learning and the importance of hands-on experience, and that whatever the age, gender or culture of students, curiosity is awakened through practical investigation and the relevance of the task. "Science is a discipline which allows set guidelines but also the opportunity for creative and lateral thought ... I regularly schedule integrated lessons which include scientific thinking and skills. Opportunities for science are all around us and getting out of the classroom and using the local environment is of prime importance."

Trish is constantly searching for ways for her students involved with 'community science' and develop a relationship with the vast bank of talented experts working in various disciplines here in Tasmania. She has been involved in the Scientist in Schools programme and her class are active members of the Aussie Sustainable Schools Network.





AND MORE PRIZES...



*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 Gail Friswell, Janine McKinnon and Ian Fitch who are our March, April and May Mures prize winners.

Gail Friswell has been diving since 2003, mostly around the Tasman Peninsula, with the occasional foray into tropical waters. Gail's diving is for 'sight seeing' and she has recently started taking photos, some of which she says 'are OK!' Her favourite photographic subjects are sea stars, ascidians and nudibranchs ("because they don't move much").

Janine McKinnon has been diving for 35 years – most of that time in Tasmania. She is a recreational diver and although she takes the odd abalone and crayfish, she dives 'largely for enjoyment of the wonderfully diverse underwater scenery'. Janine's husband plays

**ANACONDA**  
the adventure starts here

*Anaconda kindly donated TWO \$400 vouchers that can be spent on the winners' choice of Anaconda-exclusive products! Congratulations to Damien Virieux who won the March voucher.*

Damien considers himself very lucky that he gets to fish nearly every weekend. Damien used to be a dedicated dry fly trout fisherman, but now spends most of his fishing time for bream on hard body and soft plastic lures with light rods and line. His favourite fishing destination is St Helens – fishing for bream and silver trevally. He practises catch and release for 98% of all fish caught, since he considers both trout and bream as a very high value sports fish, and very poor eating compared to other available fish such as flathead. Damien fishes the Tasmanian Classic Bream and Trout tournaments (see [www.sportsfishtasmania.com](http://www.sportsfishtasmania.com)).

He caught a rock flathead at the head of a lagoon on the east coast, in knee-deep water on a 4-cm shallow running lure. Regretfully, he says, he chose to eat this fish, and he discarded the frame. It was measured with a tape at 84 cm, which would have been a new Australian record for length for the species, with the previous largest

boat boy when she dives – Janine says this usually involves drinking coffee and reading a book, with one eye out (he says) for unexpected weather changes.

Ian Fitch is a strong believer in the importance of science and conservation and is very interested in and committed to our marine environments.



Janine McKinnon at Waterfall Bay.

known specimen being measured at 81 cm. (Damien logged this fish on REDMAP – see page 6) He now plans to keep the frames of any unusual fish, freeze them and send them to TAFI for analysis.



Damien Virieux, and an enormous bream!

## LONG-SPINED SEA URCHIN OVERGRAZING



Here Dr Craig Sanderson from the Institute of Marine and Antarctic Studies (IMAS) discusses the role of Redmap in identifying options to manage long-spined sea urchins overgrazing Tasmanian rocky reefs:

Seaweed beds are essential to Tasmania’s marine coastal ecosystem, providing critical habitat for abalone, rock lobster, a raft of other invertebrates and many scalefish species. However, on the east coast they are under threat from overgrazing by the long-spined sea urchin, *Centrostephanus rodgersii*, which changes reef systems to unproductive sea urchin ‘barrens’ largely devoid of seaweed. Along the north-east Tasmanian coast, particularly around St Helens, widespread barrens habitat formed by the long spined sea urchin is now common and covers many hectares of reef. As these reef areas are underwater – and therefore out of sight to most people – it is difficult to fully appreciate the magnitude

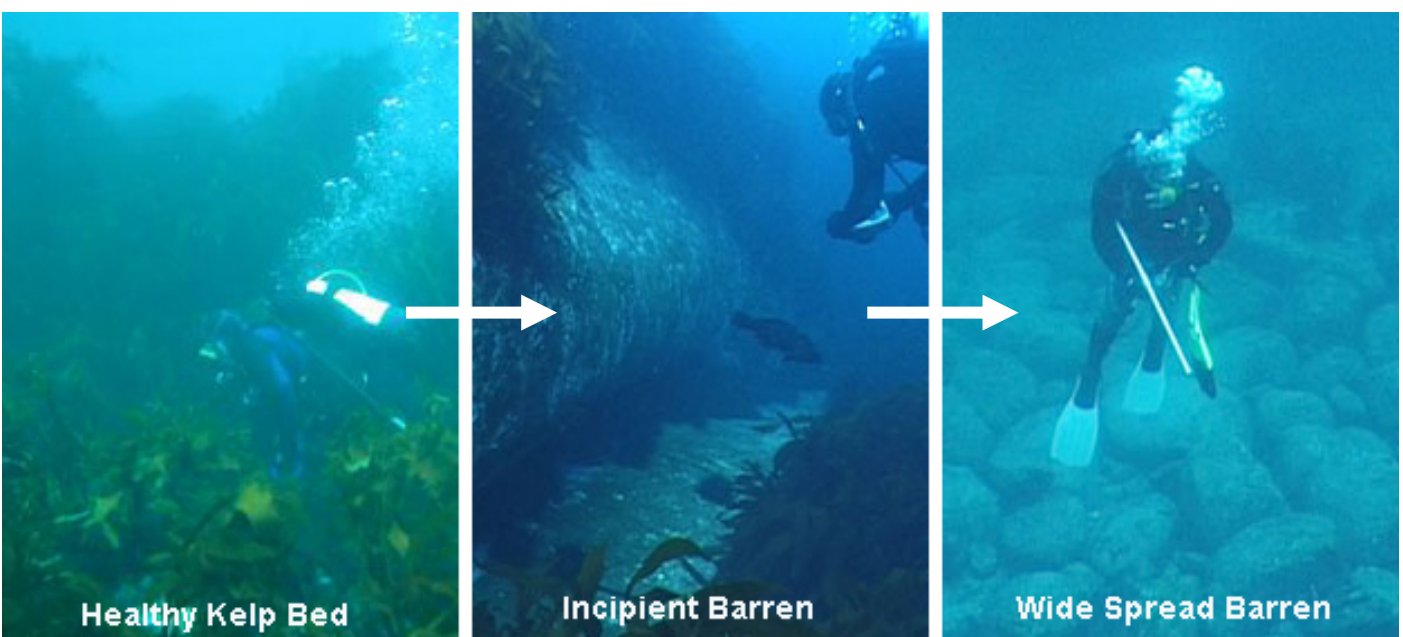
of the impact of the sea urchins. A similar impact on land would result in much greater public outcry and can be compared to the aftermath of a bush fire or forestry logging operations on vegetation stands.

Sea urchin barrens also occur further south on the east Tasmanian coast, particularly in deep water >12 m depth on exposed headlands. South of Freycinet Peninsula, the most common form of barrens habitat is the so-called ‘incipient barrens,’ in which the sea urchin creates localised grazed patches usually 1–40 m in diameter, among otherwise intact seaweed beds (see images below). Incipient barrens are the precursor of extensive barrens, and occur commonly as far south as the Lanterns at the mouth of Fortescue Bay. There are records of long-spined sea urchins being found as far south as Port Davey in Tasmania’s south west and at Pedra Banca, an isolated rock approximately 18 km off the southern end of Tasmania.

Part of the explanation for sea urchin barrens moving further south is ocean warming – waters off the east coast of Tassie receive a double whammy: the underlying warming of the rest of the world’s ocean plus warming caused by an increased extension and persistence of the East Australian Current. Sea urchin larvae have a 12-degree temp threshold – they spawn in August and as water temps have been warming we hit that survival threshold progressively down the coast.

It is extremely difficult to recover seaweed habitat once widespread barrens have formed. It is thus urgent that management options to minimise risk of formation of incipient barrens, and of extensive barrens in areas where incipient barrens occur. To this end, it is extremely useful for

(continued above right) →





researchers to know where (1) *Centrostephanus rodgersii* occurs in seaweed beds, (2) where incipient barrens arise, and (3) where extensive barrens arise.

However, given the broad geographic spread of the long-spined sea urchin, it is impossible for researchers and managers to monitor the full extent of their spread.

*So, here's what you can do to help:*

*1) log onto Redmap and report any sea urchins south of Maria Island; 2) grab a pic if you can and estimate the area over which urchins are present; 3) email Redmap at enquiries@redmap.org.au and send us any extra details like were there just a few isolated urchins, or*

*incipient or extensive barrens? All reports of the location of the sea urchins and their resultant barrens are very useful to the researchers engaged in identifying management responses to the threat of these urchins on Tasmania's east coast (even if you think others might have already reported from an area).*

More information regarding the long-spined sea urchin and the project can be found at:

[www.zoo.utas.edu.au/urchin/index.html](http://www.zoo.utas.edu.au/urchin/index.html)

and

[www.dpiw.tas.gov.au/inter-nsf/WebPages/SCAN-7DRVHC?open](http://www.dpiw.tas.gov.au/inter-nsf/WebPages/SCAN-7DRVHC?open)

## MEMBER PROFILE — BRYAN DENNY



*The day Bryan Denny left high school, he dumped his school books in the closest rubbish bin and jumped on the nearest cray boat. His mum (a teacher at Bryan's school) spent three days looking for him until the blokes at the local fish factory told her he had gone to sea. He was just 15.*

Bryan had spent some time in the school holidays going out as a deckie for some ab divers and he had no interest in doing anything else. He spent three months each year at the Australian Maritime College which, when combined with his sea time, gave him his skippers ticket by the time he was 19.

After six years on cray boats, Bryan changed course for a while and worked with Tassal and HACC in their early years, skippering boats and doing just about everything

around the fish farms. But the lure of the open sea drew Bryan back to cray fishing and it wasn't until 1996 that he started as a deckhand for an abalone diver. During that time he skippered boats for Marine Constructions and then with Mures for a while.

Bryan then decided to start diving for periwinkles and sea urchins. He would go off to the south coast by himself and fish in what was a very formative industry at the time.

By working constantly Bryan was able to buy his boat, the sixty foot 'Motunui' in November 2005 and he hasn't looked back. He currently goes fishing with seven others to spread their costs.

Always interested in having a hands-on role in the industry, Bryan wanted to help fix some of its problems, so he became President of the Commercial Divers Association in April 2008. Bryan has also been active in trying to get a processor from NSW interested in the *Centrostephanus* market, which he believes has huge potential. He would like to see introduced pests/species included in a formal management plan.

Bryan has been an active supporter of Redmap and believes it is an excellent resource for fishers and divers. Since he started fishing, Bryan has noticed the changes in fish species occurring in Tasmanian waters. One of the biggest changes he's noticed is the appearance of sweep – 20 years ago he would see just one or two of them occasionally; now he sees whole schools of them.

*This profile of Bryan Denny is an edited version of one written by Mary Brewer and published in Fishing Today.*

## PHOTO GALLERY OF SOME INTERESTING RECENT SIGHTINGS

*There is the capacity for you to log sightings of species not on the REDMAP list, but that you know or suspect may be a species usually found further north – we will be adding new species to the REDMAP list over time. Here are some interesting photos of 'non-REDMAP' species that members have logged recently.*



A **rock flathead** caught by Damien Vireaux on the east coast of Tasmania. This fish has been recorded previously in northern Tasmania, but never this far south – and this one might be one of the biggest caught yet (measured 84 cm!).



We have received several logged sightings of **ringed toad fish** (above). This fish is moderately common in shallow water in south-western Australia but primarily occurs in trawlable depths in cooler south-eastern Australian waters. Individuals have been increasingly seen by divers in southern Tas.



**Frigate mackerel** are found around the whole mainland but are more common in northern waters. Until last year, they had not been formally recorded in Tas since about 1980.



This **great white shark** was photographed by Craig Brooks off Burnie in northern Tasmania. Is it not a species out of range, but it's a nice photo so we thought we'd include it here. Check out the REDMAP page on Facebook to see a video of this shark in action.





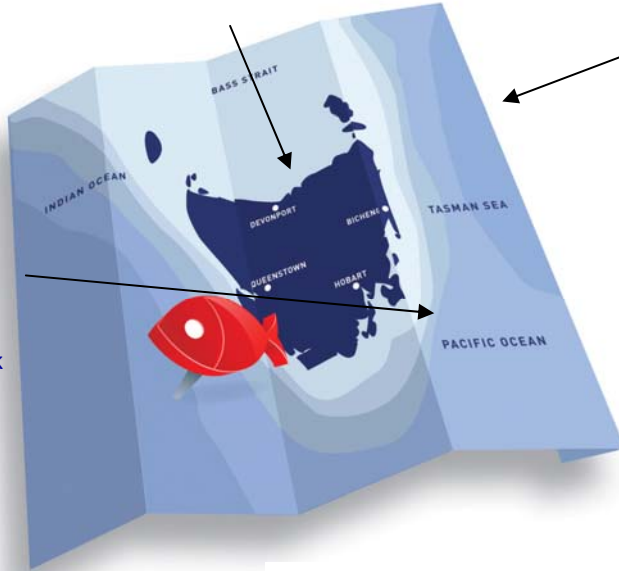
## RECENT LOGGED SIGHTINGS

### North

- 1 x southern goatfish
- 1 x Blue warehou

### North-east

- 5 x eastern rock lobster 
- 1 x zebrafish 
- 1 x grey morwong 
- 1 x halfbanded seaperch 
- 1 x gloomy octopus 



### South-east

-  1 x Luderick
-  1 x mado
-  1 x old wife
-  2 x white ear
-  2 x rock blackfish
-  3 x gloomy octopus
-  1 x zebrafish
-  2 x herring cale



*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](http://www.redmap.org.au/gallery)

- 1 x big-eye tuna
- 2 x frigate mackerel



**This luderick was caught in south-eastern Tas. Log this species if you spot it south of St Helens, or along the western or southern coasts.**

To register your sighting, please visit the Redmap website at [www.redmap.org.au](http://www.redmap.org.au) or contact the Redmap Team on (03) 6227 7277 or email [enquiries@redmap.org.au](mailto:enquiries@redmap.org.au)

**In the next issue of Redmap News:**

- Student drawing competition – details in next edition.
- IMOS – what’s happening around Tas.

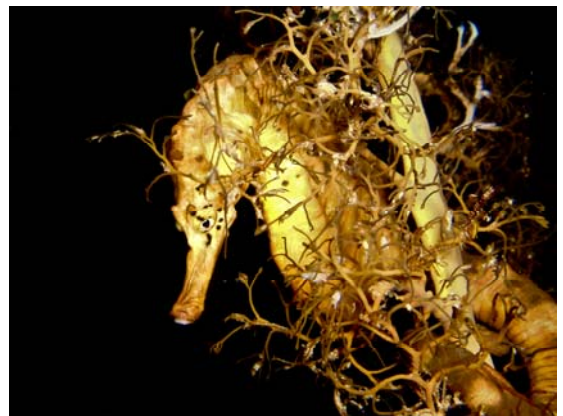


Redmap is now on **Facebook**.  
Become a fan of our page at  
<http://www.facebook.com/pages/Redmap-range-extension-database-mappingproject/121764204502516?ref=ts>

The 5th annual combined Tasmanian dive clubs weekend was held in Bicheno over the Queen’s Birthday long weekend. Stallards Camera House and Redmap sponsored the prizes for Best Photo of a Redmap Species and the People’s Choice Award. Here are the winning photos. A big thanks to Stallards Camera House, Hobart for their generous sponsorship of this prize. If you would like to see the other winning photographs from the dive weekend, go to: [http://www.tudc.org.au/news/TCCW\\_Report.pdf](http://www.tudc.org.au/news/TCCW_Report.pdf)



David Mitchell was the winner of ‘Best Photograph of a Redmap Species’ with this great photo of an old wife.



Emma Flukes took out the People’s Choice Award with this beautiful seahorse pic.



Eastern rock lobster caught by Luke.

**REDMAP Q & A**

**Question**

Hi Redmap  
I was diving up at Bicheno this weekend and came across a complete moult (carapace + tail) of an eastern rock lobster in Waubs Bay. It looked fairly new. I was just wondering if I should still report this on the Redmap site, or whether the sighting is only valid if the animal is actually alive!  
Cheers, Emma

**Answer**

Hi Emma  
That’s a very good question! Yes,

we would recommend to still log this sighting as it would be highly unlikely that a complete carapace would remain intact on a long journey down the coast from somewhere it was more common. We’ll soon be adding the capacity for people to add captions to their photos and include other detail like this for the Redmap team, so stay tuned!

*If you have any questions about Redmap that you would like answered, comments or suggestions, please email us at [enquiries@redmap.org.au](mailto:enquiries@redmap.org.au)*

**Thanks to our sponsors:**

