OceanWatch Australia

Marine NRM News #3

October 2014



OysterWatch

Brisbane Water & Tilligerry Creek oyster farmers Environmental Management System

For the past three years OceanWatch has been working closely with oyster farmers operating in Brisbane Water and Port Stephens to develop an Environmental Management System (EMS).

Through this EMS, the farmers are committing to environmentally sustainable production of oysters and the ongoing protection of their waterway.

The EMS is a voluntary initiative that outlines improvements that oyster farmers can make to their own operations, identifies risks to their businesses as well as how they can help to drive environmental enhancements within the catchment.

OceanWatch recently developed a model that allows oyster farmers to track their environmental achievements over time, and to report this information to the public in a transparent and informative manner. The Brisbane Water EMS is scheduled to be formally launched in November 2014.

The development of these EMS and implementation of environmental improvements (e.g. removal of old infrastructure and conversion to best practice have been supported through funding from the Australian Government.

For more information contact Carl Bevilacqua - Project Officer - carl@oceanwatch.org.au



Welcome to the October edition of the Marine NRM Newsletter. This month we have articles on microplastics, the dangers of letting your pet fish into our waterways, a feature on the Redmap citizen science project as well as our regular OysterWatch and Report from the West columns.

To keep up to date with OceanWatch Australia, follow us on Facebook, Twitter and Instagram or check out our Youtube channel.

25 years of OceanWatch

OceanWatch will celebrate our 25th anniversary in November and we are looking forward to the opportunity to reflect on our achievements over that time. OceanWatch in 2014 operates in a very different environment to the group put together by Sydney's father of seafood, Peter Doyle Snr in response to water quality concerns around Sydney in 1989.

As part of our celebrations, we are creating a timeline of our successes and documenting the milestones of our existence. We are calling on all the organisations, individuals, government agencies and fishers who have worked with us to dig out old photos, articles, newsletters or recordings to do with our work and our industry since 1989. This will help us build a fascinating, inspiring, amusing and thought-provoking representation of the seafood industry and OceanWatch over the last quarter of a century.

Send your photos, articles, sound bites, videos and other paraphernalia to comms@oceanwatch.org.au or Locked Bag 247, Pyrmont, NSW 2009 by Tuesday 11 November.

Report from the West

October has been another busy month for OceanWatch in Western Australia. WAFIC's Industry Consultation Unit Executive Officer Angus Callander and the WA Dept of Fisheries invited Neil MacGuffie to present at the Gascoyne and the West Coast Demersal Scalefish Fisheries annual management meetings held in Geraldton.

These meetings provide a unique opportunity to catch up with some familiar faces and to remind the professional fishing sector that OceanWatch continues to actively engage with recreational, Indigenous and professional fishermen.

Not only do these meetings provide an opportunity to remind professional fishermen of the successes we've shared but to also get an understanding of current issues affecting fisheries.

A big thanks must go to the Communications Coordinator at Keep Australia Beautiful Council (WA), Maureen Maher. On Saturday 11 October OceanWatch joined over 30 volunteers in the Woodmans Point park and beach clean up. With 33 bags of litter weighing in at over 100kg the day was a resounding success. For more information on all the Keep Australia Beautiful Council programs check out www.kabc.wa.gov.au

OceanWatch is delighted to congratulate the Tangaroa Blue team on their ten year anniversary. Neil was invited to attend an evening with those close to Tangaroa Blue to celebrate their milestone. With more than 3 million pieces of marine debris removed from the Australian coastline, the guys and gals of Tangaroa Blue are an absolute inspiration, and were deserving winners of the Coastcare Award at this year's Landcare Conference. To find out how you can get involved go to www.tangaroablue.org



Photo: volunteers with some of the 33 bags of rubbish collected at the Woodmans Point clean up (Neil MacGuffie)

For more information on OceanWatch in WA, contact Neil MacGuffie neil@oceanwatch.org.au.



WAFIC Annual Report released

Western Australian Fishing Industry Council has released its 2013-14 Annual Report. As well as being a stunning publication with incredible images, it outlines the work WAFIC has done over the past year to protect the viability of WA's seafood industry and engage with local communities. Read the executive summary or the full document at:

www.wafic.org.au/about-wafic/publications/annual-reports.

What's happening in the Marine NRM community



Explore Tasmania's incredible marine life at the St Helens Marine Discovery Weekend, 15-16 November. Go to www.marinediscover.com to see what's on offer.

Do you have a seafood industry, sustainability or marine – related event coming up? Send the details and a copy of the poster or a photo for inclusion in the next newsletter by Monday 24 November.



Marine conservation and art—by Barry Ingham

As an environmental marine artist with a passion for painting and drawing, raising funds for organisations around the world to help preserve our oceans in their natural state has become an obsession over the past 30 years. This year has been a highlight to my work and i was asked to join an elite group of artists to be a founding member of The Wildlife Art Museum of Australia.

I get my inspiration from wildlife and its fragility. I like to produce works that inspire others to become interested in the natural world and the protection of this fragile environment.

My curiosity and affinity with wilderness areas have taken me to some of the world's most beautiful places. I have walked along beaches, through the Himalayas, Africa, England, South America and much of our unique Australian coastline. Always with sketchpad and a camera close by, the solitude inspires me to attempt to capture those wonderful "fleeting moments" that nature offers. One memorable encounter was with a magnificent rare snow leopard, high in the Himalayas when we were walking in a remote region in 1976.

One of the most inspiring places is right on my doorstep, the beautiful Moreton Island. I have visited this wilderness many times, usually alone or with my wife Ann. With backpack and sketchpad, we would take the ferry to the island and just disappear into its wild beauty for a week at a time. The bird and marine life there is just amazing.

The painting 'Vanishing Point' (above) gives the observer an indication of the beauty and fragility of our mangroves and what you can do to help preserve our oceans and environment.

Barry generously donated the painting, 'Vanishing Point' to OceanWatch and it currently hangs in pride of place on the wall at OceanWatch HQ.





David Pye and Allan Bodycote taking part in the Master Fisherman training session held on the Clarence River on the 24 October 2014

OceanWatch Master Fisherman Update

Master Fishermen training sessions are continuing in New South Wales. More than 50 professional fishers have successfully completed training in Newcastle, Port Stephens, Wallis Lake, South West Rocks and Clarence River regions. The training is part of the NSW pilot project – Professionalising Industry, linked to a unit of competency in the Seafood Industry Training Package. See https://training.gov.au/Training/Details/SFIEMS201B for information on the training package.

One more training session is scheduled, commencing at 10am on Monday 10 November at Forster RSL Club. Local professional fishers from the Wallis Lake and Taree regions will attend, at the request of industry. Any professional fisher that operates in the NSW Estuary General Fishery is most welcome to attend this final training session. Please contact Michael on: michael@oceanwatch.org.au or phone 0422 618 248.

The Master Fishermen project is supported by funding from the FRDC on behalf of the Australian Government.



Birthday celebrations

Many milestones have been reached across the NRM and sustainability sectors in October.

Our good friends at Tarangoa Blue turned ten (see Neil MacGufffie's story on page 2 for more) and Ghost Nets Australia also celebrated their tenth birthday.

In 2004, representatives from 15 of the 18 coastal communities in the Gulf of Carpentaria created a plan to address the deadly ghost net phenomenon. Ten years on, more than 13,000 nets have been removed from over 3000km of coastline between Broome in WA and Chilli Beach, north of Cairns.

These Indigenous communities have trained and equipped rangers to rescue entangled wildlife, conduct regular clean-ups and collect valuable data to help the organisation develop innovative solutions.

Ghost Nets Australia is also working towards building more sustainable fishing practices in the Arafura Sea region, to stop the flow of nets.

Happy birthday and congratulations to Ghost Nets Australia and Tarangoa Blue.



Image: OceanWatch Australia, South East LLS and Australian Oyster Coast representatives with local oyster farmers Barry and Brian Allen

Shoalhaven River Festival

Around 20,000 people enjoyed the Shoalhaven River Festival on 25-26 October. The festival is a wonderful event to celebrate the river, with market stalls, entertainment, fireworks, dragon boat racing, and the Duck Dash, bringing the community out in force.

OceanWatch held a stall in partnership with the South East Local Land Services and enjoyed discussing oyster farming and marine NRM issues with members of the public.



Regional Boating Plan Consultation

The Maritime Management Centre (MMC) in NSW has recently been engaged in community consultation over 11 draft regional boating plans. The purpose of these plans is to direct infrastructure investment, with a focus on safety, accessibility and overall boating experience. The plans don't specifically recognise the productive potential of NSW estuaries and coastal waters, and there is little content around the environmental education of waterway users.

Recognising the lack of industry input and priorities in these plans, OceanWatch organised a targeted consultation between the Maritime Management Centre, NSW Farmers Association (Oyster Committee), OceanWatch and the Professional Fishermans Association. Conservations were constructive, and everyone was in agreement that a process focusing on the environment aspects of boating would be worthwhile. Discussions are ongoing and we look forward to working with the Maritime Management Centre to progress this concept in the near future.



Sustainable Seafood Presentation

OceanWatch was invited by the Central Coast Marine Discovery Centre and partners to present a talk on sustainable seafood on Wednesday 29 October at Hornsby library.

Andy took the opportunity to present a short update on various aspects of the seafood industry in Australia before discussing the work of OceanWatch – focusing on water quality, fish habitat and update of best practice.

Grants & funding

Expressions of Interest sought for Reef Systems Repair Programme

Over the next four years, through the Australian Government's *Reef Systems Repair Programme*, the Burnett Mary Regional Group (BMRG) will make funding available to assist local land managers in prioritised areas to protect, restore, and maintain waterway and wetland (riparian zone) vegetation to improve water quality entering the Great Barrier Reef (GBR) lagoon.

Closing dates for expressions of interest is **Friday 14 November**.

BMRG encourages land managers in the <u>Burrum Catchment</u> target area to complete this <u>Expression of Interest</u> (EOI) form and nominate projects that address land management issues associated with water quality improvements. The type of works we are looking to fund include fencing riparian areas, providing off-stream watering points, erosion mitigation, revegetating cleared or cropped land, and the control of weeds and feral pigs.

NSW DPI helps farmers 'go with the flow' to improve wetland water quality

Four farmers on the North Coast have put life back into drained swamps on their properties by participating in a Department of Primary Industries (DPI) program that allows them to regulate the amount of water that enters wetland areas.

DPI Fisheries Manager, Simon Walsh said the 'Go with the Flow' program allows farmers to utilise once dry swamps for grazing land, while also improving natural wetland conditions on land along the Richmond River.

"Many privately owned artificially drained wetlands along the NSW coast suffer from poor quality thin soils, which produce sulfuric acid when they dry out," Mr Walsh said.

"The acid from the soil then moves out into the river, where it can directly kill fish and oysters or reduce their ability to thrive.

"Dry swamps also encourage growth of unsuitable plants that decompose quickly once flooded, leading to blackwater events that in recent years have caused fish kills."



Mr Walsh said as part of the 'Go with the Flow' program, DPI installed simple structures on four properties near Coraki on the Richmond River.

"This gives farmers the opportunity to regulate the amount of freshwater in the swamp to meet their changing needs," Mr Walsh said.

Mr Walsh said more water in swamps also has a range of environmental benefits for wildlife and water quality for the catchment.

"This has seen significantly improved conditions for water dependent wildlife, including fish, prawns, frogs, insects and waterbirds."

Landholders with drained swamp country that are interested in participating in the program should contact Simon Walsh on (02) 6626 1256.



Images: Boutells Lagoon before and after 'Go with the Flow' (Simon Walsh)



Pet or Pest - the solution is quite simple

Like many of our coastal waterways, the Ross River in Townsville supports a vast array of terrestrial and aquatic species. Unfortunately, like a growing number of our rivers, streams and coastal catchments, it is also playing host to an increasing number of pest species. But where are they all coming from? We are the culprits.

While most of us are aware of the threats currently posed by feral fish species such as European carp and tilapia, many may not appreciate the array of other exotic species currently infiltrating our waterways. Most have entered our country as prized aquarium specimens, but the problem comes when our prized pet becomes an unwanted burden.

While the majority of dedicated fish keepers would never release exotic species into our river systems and coastal catchments, there are some that do. Whether this be to give a pet a chance at 'freedom' or for some other reason, the practice poses significant risks to our unique aquatic heritage, and with the rise of imported marine species entering this country, our coastal systems are also potentially at risk.

The problem is not only with fish species but also crustaceans, aquatic plants, coral, seaweeds and marine invertebrates. Even native species can be a cause for concern through translocation between drainages. Releasing pets has another serious implication that is rarely considered- the threat of disease. The impacts upon commercial fishing and aquaculture industries could be profound.

So what's the answer? Well simply, it's up to us. Our aquatic friends do not choose to leave and enter our waterways of their own accord. We put them there. In order to stop this, we as responsible aquarium owners, be it fresh or saltwater enthusiasts or our children keeping goldfish, need to exercise care when disposing of our watery friends. By applying the following basic principles we can stem the tide of exotic species disrupting the sensitive balance of our streams, rivers and coastal waterways.

Pet

the

solution's

simple

PEST

NEVER release aquarium fish, crustaceans, invertebrates or plants into our coastal or inland waterways

ALWAYS dispose of dead or unwanted aquarium species appropriately

ALWAYS return unwanted aquarium species to your local pet store

NEVER dump unwanted or dead fish into sewerage or stormwater

ALWAYS use local native species in outdoor ponds.



Protect our oceans as you wash your face

Fauna & Flora International has released the Good Scrub Guide Australia, a consumer guide to purchasing Australian facial scrubs that are free of microplastics.



Microplastics are the tiny coloured specks floating in many brands of facial exfoliator, shampoos, body scrubs and even toothpastes. These tiny particles are so small they can't be filtered by our sewage systems and pass through to the ocean where they become toxic marine debris. Animals mistake them for food, absorbing their toxins and entering the food chain where they can potentially harm us.

CSIRO research released last month found Australians can't hide from plastic debris, it litters all our coastal waters and is ingested by marine wildlife, with 43% of all seabirds found with plastics in their guts. The CSIRO report highlights urban centres as the main source of plastic marine debris and Sydney Institute of Marine Science research confirms this with recent sampling of sediments within Sydney Harbour recording the highest ever concentration of microplastics. The main offenders are abraded ropes, plastic bags, clothing fibres and of course, cosmetics.

Fauna & Flora International's President, HRH Princess Laurentine visited Australia in May this year to highlight the threat that microplastics pose to the environment.

During her visit she meet with the newly appointment NSW Environment Minister Hon. Rob Stokes MLC, who announced last month his plan to introduce a ban on microplastics by 2016.

By releasing the Good Scrub Guide Australia, FFI is arming Australian consumers with the information they need to avoid buying products that contain microplastics.

Redmap: Sea life on the move

Australian fishers and divers are seeing marine life not usually found in their local seas — and many are reporting these uncommon species on the Redmap website and app!

Redmap - the Range Extension Database and Mapping project — is a citizen science project that tracks the distribution of marine life along Australia's vast coastline. The community sightings act as an early indication of which species may be shifting their known ranges in response to changes in Australia's seas, including ocean warming. Or, as Redmap calls it: 'shifting marine postcodes when things get too hot at home.'

Some interesting Redmap sightings include a tropical manta ray (*Manta birostris*) and yellow-bellied sea snakes (*Pelamisplaturus*) reported on Tasmania's east coast- much further south than expected! Also, a whole range of tropical reef fish such as red emperor (*Lutjanussebae*) have been popping up below Geraldton and even near Perth. And warm-water fish like butterfly fish, more at home in Queensland waters, have been spotted near Sydney.

Redmap has been very successful in using these community sightings to generate robust, verified observations of out-of-range marine species. Observations are accompanied by a photograph for validation. Photos provide geo-tag information to confirm the sighting location. A large network of marine scientists verifies the photos to confirm species identification. In other words, Redmap crowd-sources both the data (community observations) and its scientific validation (using a panel of marine experts around the country).

Over a thousand observations have been shared on Redmap. Nearly 30 per cent of the confirmed sightings were considered uncommon where they were spotted. More than 80 different species have been reported around the country, mainly by divers (58% of sightings), fishers (31%), beachcombers (7%), boaters (2%) and swimmers (2%).

Redmap is hosted by the Institute for Marine and Antarctic Studies (IMAS), at the University of Tasmania, in collaboration with lead organisations around the country. Redmap appreciates the support of Australian fishers, divers and the community; and Australian government grants.





Redmap allows Australians to both contribute to, and learn about, the science of ocean warming and species range shifts. And all through activities they enjoy like fishing, diving and boating! Check out redmap.org.au for the latest photos of fish, lobsters, sharks, jellyfish, rays and octopus, to name a few, uploaded to Redmap. You can also follow Redmap on Facebook and Twitter.

It is hoped that the continued support of citizen scientists will, over time, allow Redmap to understand and predict changes in the distributions of Australia's marine life with greater efficiency. Sightings can be logged on the website or via the Redmap iPhone or Android app.



Image: Nautilus (Simon Grove)

Marine NRM News call for contributions

We are interested in the work being done in natural resource management around Australia. Send your articles, photos and events information to comms@oceanwatch.org.au for inclusion in the bumper OceanWatch 25th anniversary issue, published on Friday 28 November.



In the news

The great unknown: the life and times of fish living on sand

Sand—that grainy stuff that covers vast swathes of the ocean floor—may not seem as exciting a habitat as coral reefs or seagrass meadows, but according to Lachlan Fetterplace from the University of Wollongong, there's a whole lot going on in the vast sandy stretches of the ocean.

According to Lachlan, sand or soft sediments cover most of Australia's state and national waters and are heavily exploited by commercial and recreational fishing.

"For a habitat that is so heavily exploited, there is a serious and immediate need to determine the basic ecology of the fish species present, the effects of fishing and also to examine the success of conservation efforts in place."

More than 70 per cent of Australia's marine protected areas cover soft sediments.

"Yet to my knowledge, both nationally and internationally there have been no studies looking at the effectiveness of marine protected areas in conserving soft sediment fish," he said.

http://bit.ly/1D426zD

Clean report card for Australian fisheries

The Australian Bureau of Agriculture and Resource Economics and Sciences (ABARES) has released the Fisheries Status Report 2013-14.

The independent report found that no stocks managed by the Australian Government are subject to overfishing.

Last year's report stated that eastern gemfish was subject to overfishing in the south-east of the country. However, the new report shows that that eastern gemfish is no longer overfished.

The status of ocean perch also improved from 'amber' to 'green' and there were no negative movements in the status of South East Trawl stocks.

Read the full report here: http://bit.ly/1nL4HNe

http://bit.ly/1w9x0GO



Coming Events

Western Australia

- Esperance Blessing of the Fleet
 9th November, Bany Creek Boat Harbour
- Dongara Blessing of the Fleet
 15th November, Port Denison Foreshore, as part of the Larry Lobster Festival

Victoria

Apollo Bay Seafood Festival
 21 February 2015, Apollo Bay

South Australia

Tunarama Festival
 23 -26 January 2015, Port Lincoln Foreshore

Tasmania

Sustainable Living Festival
 8 - 9 November, Hobart Waterfront

New South Wales

- Brisbane Water Oyster Festival
 9 November, Ettalong Beach
- **NSW Coastal Conference 2014** 11–14 November, Ulladulla

NSW estuaries: a sustainable resource for everyone? 11 November 2014, 10:00-5:00pm, Ulladulla Civic Centre

In conjunction with the NSW Coastal Conference an Estuary Technical Workshop is on offer, featuring speakers from a range of agencies, presenting the latest information on a number of current issues of interest to coastal and estuarine managers. The workshop will explore ways science can be better linked to planning processes and to on-ground actions and decision-making. There will be formal and informal opportunities for discussion and interaction with other workshop attendees.

Go to www.coastalconference.com for more information or to register.