

# OCEANWATCH AUSTRALIA NEWS

EDITION 3: SUMMER 2006-2007

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## ADVANCING SUSTAINABLE FISHERIES

### New projects – TAngler Bin



#### Piping up for Christmas!

The TAngler Bin project is up and running with the launch of the Rockdale City Council's network of 23 TAngler Bins on the 7th December 2006 on Brighton Le Sands beach. Rockdale City Council is the project's lead Council, and they have become the first council in New South Wales to install a network of our bins.

The TAngler Bins around Botany Bay are the first of 400 to shortly appear throughout coastal NSW in partnership with coastal Councils. Next to rollout include, Pittwater Council, Wollongong City Council and Kiama Municipal Council, with many more to follow in early 2007.

Brad Warren, Chair of the Ocean Watch Australia Board of Directors said,

*"The responsible fisher understands that keeping their fishing spot tidy of littered line is linked with keeping the recreational fishing experience great, keeping harmful fishing line away from wildlife, and increases the knowledge of the fisher to better protect the environment."*

OceanWatch Australia has had an excellent response

## TAnglerBin

RECYCLE FISHING LINE TO SAVE WILDLIFE

The TAngler Bin Project has been assisted by the New South Wales Government through its [Environmental Trust](#) and the [NSW Recreational Fishing Trust](#)

#### Did you know..?

#### Recreational Fishing Line Facts:

... If each recreational fisher in New South Wales litters one metre of fishing line a year – in ten years there would be enough line lost to reach Perth ...and back!

... If each recreational fisher in Australia litters one metre of fishing line per year – in ten years there would be enough line lost to wrap planet earth!

and support from the recreational fishing world for this project. John Burgess, Executive Officer of the Australian National Sportfishing Association stating,



*“The TAngler Bins are a simple and effective device which will not only minimise the potential harm and injury to bird life and keep the coastal environment clean, but will also send out a clear educational message to fishers and the general public that we need to care and look out for our wildlife and the habitat.”*

Pictured on the beach at Brighton is the new TAngler Bin with (l-r) Stephen Smith, Chief Operating Officer – Vinidex (project sponsor) depositing the first tangled line into the TAngler Bin along with Steve Kennelly, Chief Scientist – NSW Government Department of Primary Industries, Councillor Shaoquett Moselmane, Deputy Mayor – Rockdale City Council and Brad Warren, Chair – OceanWatch Australia.

We also have exciting news to report. We are proud to announce that Vinidex – Australia's leading manufacturer of thermoplastic pipe systems for the transportation of fluid, data and energy, are new sponsors of the TAngler Bin project in New South Wales. Vinidex has grown within the Australian community over the last 40 years and sees itself as having an important role in setting and maintaining ethical business standards and practices.

Vinidex recognise that environmental issues are now the subject of greater community awareness than ever, and Vinidex has long been mindful of



these issues. Their products are installed daily in projects critical to the effective and efficient use of water and wastewater. The sponsorship includes the

donation, construction and distribution of the bin to coastal locations throughout NSW. The PVC pipe we are using for the TAngler Bins are completely recyclable! So – thank you Vinidex and welcome aboard!!

Keep an eye out in the New Year for the updated TAngler Bin web page. This will have all the latest information on the new TAngler Bin locations, information on additional councils joining our project as well as the results of our NSW Recreational Fisher Survey. For further details contact [Lowri Pryce](#) on 0434 670 785 or (02) 9660 2262

Click the link for more information on [TAngler Bin](#)

## SeaNet assisting industry to reduce bycatch

### Benefits of square mesh codends promoted in Queensland scallop and prawn trawl fisheries

A fisheries extension project aimed at assisting Queensland's trawl fishers to adopt square mesh codends is approaching completion. The project, a collaborative effort supported by the Fisheries Research and Development Corporation (FRDC), the Queensland Department of Primary Industries and Fisheries (QDPI&F), OceanWatch Australia's Seanet Extension Service and Ecofish was initiated after research showed that square mesh codends can be highly effective at reducing bycatch in Queensland's saucer scallop and prawn fisheries.



SeaNet is funded by the Australian Government's [Natural Heritage Trust](#)

Research has shown that square mesh codends in commercial trawl fishing nets can be used to significantly lower bycatch and improve the selectivity of target species. For example, by using a combination of square mesh codend and turtle excluder devices (TED), bycatch rates in Queensland scallop trawls were reduced by 77% compared to a standard diamond-mesh net codend. The square mesh codends were also shown to be very effective at reducing the catch rates of undersize scallops. Similar at-sea research trials have also demonstrated that bycatch



Photo: The square mesh codend used during an at-sea research charter trial in the north Queensland tiger/endeavour fishery. Note how the squares remain open allowing small fish and other bycatch to escape. Standard diamond mesh codends tend to close up, thus retaining large amounts of bycatch.

rates in the deepwater eastern king prawn fishery off southern Queensland were reduced by 29% by using a combination of a square mesh codend and TED. Importantly, these reductions in bycatch were achieved with no loss of marketable sizes of scallops and prawns.

Another recent research charter undertaken further north in the state's tiger/endeavour prawn fishery showed that bycatch can be reduced by 34% as a result of square mesh codends compared to standard diamond-mesh codends, with no significant loss of marketable size prawns (all species pooled). Detailed analyses of the prawn catch revealed that the square mesh codend actually caught significantly more banana prawns than the standard codend.

These reductions in bycatch are significant when one considers that Queensland has the largest prawn trawl fleet in Australia and that the total amount of bycatch produced

annually is in the order of several thousand tonnes.

Two factors contribute to the effectiveness of the square mesh codends. Firstly, because the catch accumulates in the codend, the square meshes allow small fish to escape easily from the net without having to expend large amounts of energy trying to find an escape hole or route. This is important when trying to exclude small fish as they generally lack swimming speed and stamina. Further, small prawns, undersize scallops and small crabs, sea urchins, shellfish, etc are excluded from the square mesh codends as they simply fall through the large square meshes.

Secondly, large mesh sizes appear particularly suited to these fisheries as the targeted animals are relatively large compared to the bycatch species. This, combined with the fact that the meshes remain open throughout the trawl, allows most of the small bycatch species to escape, while retaining the marketable scallops and prawns.

Other preliminary research on square mesh codends indicates that they may also reduce drag while being towed through the water, compared to a standard diamond mesh codend, thus reducing vessel fuel costs.

The main objective of the extension project was to construct square mesh codends and lend them to trawler operators free-of-charge to trial. The project also offered assistance and on-going support to these fishers, as well as providing advice on the construction of square mesh codends to net makers.

Overall, 36 square mesh codends were trailed by fishers during commercial trawl fishing operations in Queensland's eastern king prawn, leader prawn and saucer scallop fisheries. Twenty eight percent of fishers reported bycatch reductions greater than 20%, while 46% reported reductions of 10-20%. Importantly, 90% of fishers reported that there was no effect on the catch rates of the target species. The most promising result from these trials was that 82% of the fishers said that they will continue to use the square mesh codends in their chosen fishery.

The extension project is approaching completion. Project staff also intend to produce a DVD on the construction and installation of square mesh codends that fishers and net makers can use. The DVD will also present some research results that show the reductions in bycatch that can be achieved by using these devices.

Further information on the extension project can be obtained from: Denis Ballam – Far North Queensland SeaNet Officer, Cairns. Phone: (07) 4032 2234 or Matthew Campbell or Tony Courtney, Queensland Department of Primary Industries and Fisheries. Phone: (07) 3817 9591 or

Click the link to view the [full article](#)

## Preliminary results of at-sea testing of the 'Popeye Fishbox' bycatch reduction device Oct-Nov 2006

The 'Popeye Fishbox' bycatch reduction device (BRD) was assessed by Erik Raudzens (AFMA) for approval by the Northern Prawn Fishery's bycatch sub-committee during the last three weeks of the 2006 tiger prawn season. Funding for the project was provided by the Natural Heritage Trust. The Popeye Fishbox was assessed on the *FV Adelaide Pearl* during normal industry operations for 82 trawls, with 54 trawls trailed with the BRD positioned at a distance of 70 meshes from the codend draw strings and a further 28 trawls trailed at 100 meshes.



Photo: The net on the right has the 'popeye fishbox' BRD installed, the net on the left doesn't. The difference in amount of bycatch is quite obvious to the eye. Photo taken by Erik Raudzens (AFMA).

### Methods

During the assessment twin trawl nets containing standard Turtle Excluder Devices (TEDs) were compared. One net contained the Popeye Fishbox with the other net containing a BRD. (image on right) All small bycatch (including sharks and rays) from both nets was separated and weighed in lug baskets. All prawn catch was also weighed separately to assess for potential prawn escapement. The BRD was swapped from starboard to port side nets twice during the trial to account for potential differences in both nets performance.

### Results

The following results are sourced from raw data. Further statistical analyses will be presented in a final report to be completed in January 2007.

#### 70 Meshes from the codend drawstring

- The Popeye Fishbox captured 52.1% less small bycatch with a negligible reduction in prawn catch.
- The Popeye Fishbox captured 85.7% less sea snakes.
- The number of small sharks and rays was approximately 35.4% less in the Popeye Fishbox.

#### 100 Meshes from the codend drawstring

- The Popeye Fishbox captured 28.7% less small bycatch with a 2.2% increase in prawn catch.
- Causes for a decreased reduction in the capture of small bycatch at 100 meshes are still being investigated.

### Preliminary Conclusions

- Popeye's Fishbox results in a substantial reduction in the amount of small bycatch.
- Further analyses are required to determine whether the distance from the codend is crucial in reducing the amount of small bycatch.
- The 17.6% reduction in prawn catch when targeting banana prawns may suggest that the BRD is best applied during the tiger prawn season, although current data is limited.

- Further analyses on catch compositions, twilight versus night trawls and sharks and rays will be presented in the final report.

Acknowledgements: Thanks go to the skipper and crew of the *FV Adelaide Pearl* and A Raptis & Sons Pty Ltd for their efforts and the opportunity to trial the 'fishbox'.

(editors note – by the way, the fishbox is named after its creator, a Queensland netmaker and former fisherman called "Popeye")

For more information contact Denis Ballam, Far North Queensland SeaNet Officer, Cairns. Phone: (07) 4032 2234

## A workshop for fishers to investigate options to improve bycatch reduction in tropical prawn fisheries.

This workshop was held in Cairns on the 21-22 November 2006. It was the first of 3 workshops planned for the tropical prawn trawl fisheries. The other workshops will be held in Darwin just prior to the opening of the Banana prawn season next year and in Southern Queensland before the opening of the east coast prawning season, times and dates to be announced. These workshops have been funded by the Fisheries Research and Development Corporation (FRDC). OceanWatch Australia is on the steering committee for these workshops, along with the Australian Maritime College, Australian Fisheries Management Authority, CSIRO and Queensland Department of Primary Industries and Fisheries.

The Cairns workshop was well attended with a good number of fishers making the effort. A number of international speakers presented and there was a willing exchange of results and innovative ideas over the two days.

Gear displays were laid out on the lawn in front of the venue, giving all participants a chance to examine new BRDs, new designs for trawl otter boards and new soft brush ground chains.

Some of the topics covered were:

- Status and knowledge of prawn behaviour in prawn trawl fisheries;
- Performance of innovative otter boards and ground gear to reduce bycatch and seabed impact;
- Application of acoustics to reduce bycatch in prawn trawl fisheries;
- Flow field studies in and around TEDs and BRDs with potential to improve performance;
- Application of electricity to reduce bycatch in shrimp trawls;
- Application of light stimuli to reduce bycatch in prawn trawl fisheries; and
- Status of knowledge of fish behaviour in demersal trawl fisheries.

A handbook for industry will be produced from the proceedings of the workshop. For more information contact Denis Ballam, Far North Queensland SeaNet Officer, Cairns. Phone: (07) 4032 2234

## Initial trials of the rotated-mesh panel (T90) for use in the South-East Trawl Fishery as a bycatch reduction device.

The Australian South-East Trawl Fishery (SETF) has in the order of 80 licensed fishing vessels targeting fish species including flathead, blue grenadier, pink

**Northern Prawn Fishery, Torres Strait Prawn Fishery, and East Coast Otter Trawl Fishery Skippers and Owners WE NEED YOU!**

You're invited to participate in a workshop on innovative options to reduce fish bycatch and improve fishing efficiency, and contribute to an industry plan for future bycatch reduction

**21-22 Nov 2006, Cairns Yacht Squadron**

Presentations from Australian and International Speakers

- fish and prawn behaviour
- use of sound, light, and electricity
- otter boards, gear modifications, current BRDs
- glow sticks, shark shields, T90 mesh panel

Financial assistance may be available for industry participation

Wade Whitehead (AFMA) (02) 6272 5029    Tony Courtney (OOPI) (07) 3817 9158    Dennis Ballam (SeaNet) (07) 4032 2234

Logos: AFMA, Queensland Government, CSIRO, Queensland Department of Primary Industries and Fisheries, OCEANWATCH AUSTRALIA, SEA NET

ling and redfish. SETF vessels use demersal trawl nets catching over 30,000 tonnes of fish annually (valued at around \$70 million).

The development of more effective by-catch solutions for the south-east trawl sector in Australia is of vital importance, however due to the multi-species nature of catches in the SETF, trawl operations are unable to avoid the take of non-commercial (bycatch) species. Reducing catches of small and unwanted fish is a priority issue being addressed by South East Trawl Fishing Industry Association (SETFIA) and the Australian Fisheries Management Authority (AFMA). AFMA has stated in 'Future Operating Environment for Commonwealth Fisheries' that they wish "to implement measures to significantly reduce by-catch, with a goal to halve it by 2008." OceanWatch Australia is working hard with the industry and AFMA to make this goal possible.

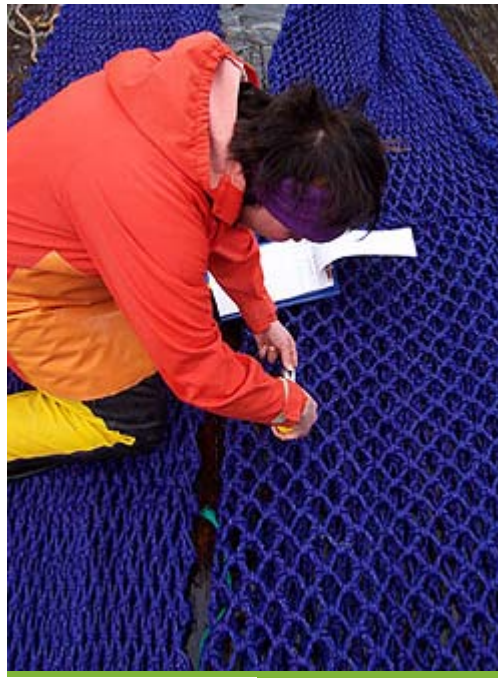


Photo: Victorian SeaNet Extension Officer Kate Milner working on T90 at sea trials.



Photo: Rotated-mesh (T90) on left and standard diamond mesh on right.

Rotated-mesh (T90) is netting turned 90 degrees to that of standard hung diamond-mesh netting found in fishing nets. The development of the rotated-mesh panel (T90) for use in the SETF is one such measure to achieve the goals outlined by AFMA, however, scientific data is yet to be obtained on its effectiveness to reduce bycatch. Anecdotal evidence from fishers working in the South-East Trawl suggests that a rotated-mesh panel placed into trawl nets does reduce the amount of by-catch and, it is much easier to install, is more robust and is easier to repair while working at sea compared to a square-mesh panel.

Quantitative scientific data on the selectivity of the rotated-mesh panel was collected through trials with a trouser trawl on board the Australian Maritime College *FTV Bluefin*. This project was the culmination of many stakeholder inputs; including Australian Maritime College (AMC), Department of Primary Industry Victoria (DPI Vic), South East Trawl Fishing Industry Association (SETFIA), Australian Fisheries Management Authority (AFMA), the Fisheries Research and Development Corporation (FRDC) and OceanWatch Australia.

Initial data collected indicates that the rotated-mesh panel has the potential to reduce the amount of by-catch from trawl fishing operations and would be a viable alternative to the use of a square-mesh panel.

For more information contact Kate Milner, Victoria SeaNet Office, Phone: (03) 9824 0744

## Circle Hooks in the Eastern Tuna and Billfish Fishery (ETBF)

A Natural Heritage Trust (NHT) funded project is trialing circle hooks in the Eastern Tuna and Billfish Fishery (ETBF). The project team includes officers from the Bureau of Rural Sciences (BRS), OceanWatch Australia's SeaNet ETBF Officer, Belldi Consultancy and Australian Bureau of Resource Economics (ABARE). It has also received support from the Australian Fisheries Management Authority (AFMA) and the commercial fishing industry operators.

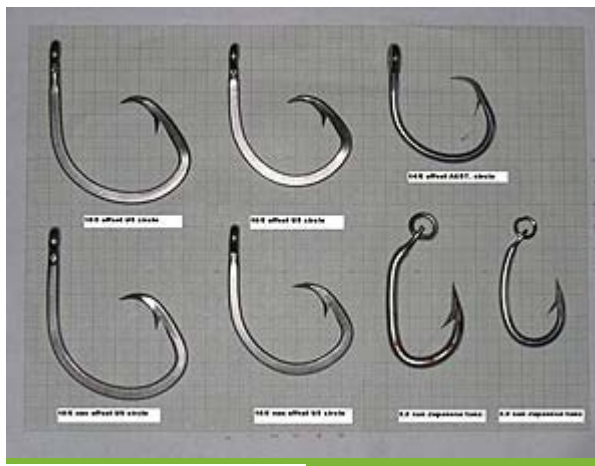


Photo: A selection of sizes and styles of circle hooks compared to Japanese tuna hooks

Over the last twelve months there has been a substantial voluntary uptake of circle hooks in the ETBF, particularly in the albacore sector of the fishery. This is partly as a result of information provided to operators during port visits. Other sectors, however, are still hesitant to adopt these hooks, fearing that this may negatively impact on their catch rates, in particular broadbill swordfish.

The aim of this project is to build on the information base provided by the 2005 pilot project that identified areas of investigation requiring greater scrutiny. The project also considers combinations of bycatch mitigation measures, also including bait type, weighted swivels and wire leaders. This suite of measures have been proposed or implemented to reduce the longline bycatch of Threatened Endangered and Protected (TEP) species such as marine turtles, seabirds and sharks.

Fishers participating in the trials will be supplied with a set of longline branch lines (or snoods) rigged with circle hooks suitable for the target catch in that sector of the fishery. These snoods will then be fished in paired combination with existing tuna hooks. Data on catch rates, life-status and fish size will be collected for non-target and target species by AFMA observers and analysis will also be conducted on the differences in economic value of the catches by hook type.

The role of the SeaNet Officer is to coordinate fisher participation, gear acquisition and assembly, facilitate workshops, conduct pre and post-fishing briefings and disseminate the results of the study to industry members, management officers and scientists.

## SeaNet driving industry best practice

### Clyde River Environmental Management System – Oyster Farmers taking a proactive approach

The oyster farmers on the Clyde River in NSW have banded together and are taking a proactive approach to maintaining a sustainable industry. The group has contributed their own money and also received additional funding from the NSW Department of Regional and State Development to develop an Environmental Management System, or EMS.

An EMS is a step-by-step process to identify and manage environmental impacts, risks and opportunities on a continuous basis. It is an industry-driven initiative that seeks to contribute to the sustainability of oyster farming, as well as increase community understanding of cultivation methods used and the management and regulations that apply to the industry.

The EMS is being developed by the farmers



Photo: Ashley Suters (left) and Alan Sebbens tend to their oyster lease on the Clyde River. Part of the EMS will document oyster cultivation techniques used on the Clyde River to broaden community understanding of the industry.

themselves with the assistance of OceanWatch Australia's NSW SeaNet Officer.

The EMS will be based around identifying



Photo: Long-line floating bag cultivation is one of the many variances to traditional growing techniques used on the Clyde River. This method does away with fixed infrastructure, reduces seagrass shading and maintains the oysters in the feed column for the duration of the tide cycle.

McAsh, a Clyde River oyster farmer. "But it is vital for our industry that it stays that way."

A draft of the document will be circulated amongst the growers in December, and when all parties are satisfied with the content the EMS, a final draft will be made available for public comment.

### Victorian Abalone Divers Bio-Security Kit

The SeaNet Officer in Victoria is currently working with Victorian abalone divers to develop a bio-security kit. The kit is being developed in response to the outbreak of a herpes-like virus in the wild stock in western Victorian waters. The kit is a proactive mitigation measure the abalone industry is taking against further outbreaks and translocation of the disease.

The bio-security kits are being put together by the SeaNet Officer and contain:

- a list of procedures if an animal is suspected to have the virus,
- photos of infected abalone,
- contact phone numbers,
- reporting forms,
- zip-lock bags for samples, and
- a waterproof disposable camera.



Photo: Contents of the bio-security kit

The kit will be distributed to approximately 80 commercial divers throughout Victoria and western South Australia by the SeaNet Officer. Contact [Kate Milner](#) for more information on (03) 9824 0744

## SeaNet cleaning up marine debris

**Clean Up Yorke Peninsula** (funded by Coastcare / Coles sponsorship - Landcare Australia Ltd.)

The marine environment surrounding Yorke Peninsula in South Australia is unique. The east and west coasts border two inverse estuaries, namely Spencer Gulf and Gulf St Vincent. These areas are home to many endemic species – marine endemism is estimated to be in excess of 80% in southern Australia.

This area is also home to highly productive

actions or goals that will improve the environmental performance of the industry and establish scheduled time frames for completion of these tasks. The document will also look at how the farmers can assist groups such as the Southern Rivers Catchment Management Authority (SRCMA) in prioritising on-ground works for the benefit of the catchment and the community. The SRCMA is currently coordinating a project, which will see \$430,000 invested in protecting and enhancing the high conservation status of the river and its catchment over the next 3 years.

"We are lucky in that the Clyde has a relatively undeveloped catchment," said Ewan

commercial fishing operations. All the regional communities on Yorke Peninsula owe their 150 years of existence to the professional fishing industry. The industry still plays an important role in the economy and social life of the regional centres.

The small resident population of Yorke Peninsula is dominated by primary industries, agriculture in the interior and professional fishing along the coast. Although it is only a maximum of four hours drive from Adelaide, the area has very limited infrastructure for waste removal, reduction and recycling.

This projects' aim is to complete an inventory of all waste produced by the professional fishing industry on Yorke Peninsula, some of the waste already identified includes plastics, oils and card board.

Following identification of the types and quantity of waste products produced by the professional fishing sector, the long term goal of the project is to implement alternative solutions to reduce the waste generated and for those areas where the waste produced cannot be further reduced, to implement a recycling strategy for the region. The SeaNet Officer, in conjunction with local fishers from each fishing sector on Yorke Peninsula and the local area schools, Port Vincent Primary School (PVPS), quantified and categorised the different waste produced as a result of fishing practices. This led to the discussion and identification of areas within the region where improved recycling infrastructure is required to improve on current, and develop new waste minimising methods and strategies in reducing, reusing and recycling waste on the Peninsula.

One fisher from each fishery present on Yorke Peninsula retained the waste accumulated over a series of fishing trips, which was analysed by students. Students then quantified the waste into different categories, eg: hard plastics, soft plastics, cardboard etc. This highlighted specific areas that need to be improved upon, and ideas are currently being investigated to assess the feasibility of different recycling projects for some of the waste categories such as the calcium content of oyster shells being utilised in the pet birdfeed industry; the recycling of plastics into products currently used in the fishing industry sectors such as bait baskets; and the placement of additional waste oil collection stations for oil recycling.

### Coronation Beach to Bowes River WA Cleanup October 17, 2006

October 17 saw another big effort from West Australian Rock Lobster fishers to remove decades of accumulated rubbish along beaches and coastal dunes between Coronation Beach to the Bowes River.

Nine owner operators from Horrocks including two lobster fishermen from Port Gregory and one from Kalbarri collectively removed 187 large bags of rubbish and about 250 kg of glass from approximately 20 kilometers of coast. Seven four wheel drives and three, four wheel ATV's (all terrain vehicles) were involved in the effort.



Photo: Brian Klingberg, a fisher on Yorke Peninsula, talking to Port Vincent Primary School students about the waste collected from the long-line fishing sector.



Photo: Loading the 4WD

The types of debris removed originated from various sources including international shipping,

domestic sources and recreational and commercial fishing activity. The most numerous items collected were plastic drinking bottles, glass spirit and beer bottles, floats and plastic food wrappers.

“It was amazing to finally see the guy’s in the distance progressing toward us; it was like watching some sort of swarm moving up the beach”. “We had one team heading from the Bowes River south and a second team heading north from Coronation Beach to eventually meet”. It was a tremendously satisfying feeling seeing the obvious change we had made when returning to Horrocks after finishing the cleanup,” said WA SeaNet Officer Carl Bevilacqua.



Photo: Photo: Greg Ash, Brad Armstrong, Colin Suckling, Terry Ash, Carl Bevilacqua, Graeme Lucas, Colin Reynolds, Colin Jupp, Greg Horsman, Phil Horsman, Absent: Anthony Jupp, Graeme Cleary Mary Ash, Chery Ash

Some of the fishermen involved were also part of the team who tackled the Dirk Hartog Island’s mystery beach cleanup in 2005, who recently received the Community Stewardship Award at the WA Department of Fisheries Reward and Recognition night 2006, hosted by Hon John Ford JP MLC Minister for Fisheries.

From the numerous camp sites and piles of old beer bottles it is obvious this area

is frequented by campers, shore based fishers and surfers. It’s disappointing to think that people come to enjoy the natural beauty of an area like this but cannot do so without leaving all manner of rubbish behind when they leave.

All the rubbish collected was taken to the Northampton refuse site followed by a few well deserved beers and a barbeque. On behalf of OceanWatch Australia’s SeaNet Environmental Extension Service and the Western Rock Lobster Council thanks must go to all the fishermen involved and particularly Cheryl and Mary Ash for their contribution.

## WA Cape to Cape Cleanup October 14, 2006

This year’s Cape to Cape Beach Clean Up, had an amazing response with over 190 volunteers cleaning up 43 different stretches of coastline between Cape Leeuwin, Cape Naturalist and Busselton, WA.

This year representatives from the professional fishing industry got a team together and tackled the very picturesque stretch of coastline from Sugar Loaf Rock, through Windmills Beach to Cape Naturalist.

The Team scoured the beaches and dunes removing all manner of objects with the most common item encountered being plastic water



Photo: The Cape to Cape cleanup crew

bottles. The real challenge was transferring the filled bags from the beach up a steep 50 metre lime stone cliff for transport back to the collection point. A total of 13 large bags of rubbish were collected from over 3 kilometres of beach.

WAFIC and OceanWatch Australia would like to acknowledge professional Rock Lobster fishers Mal Millard, Paddy Daniels and his two sons, WAFIC staff members Felicity Horn and Kym Coffey and Brad Armstrong from the Swan Maritime Institute for their efforts.



Photo: Some of the rubbish collected

For further information or if you have an area you are particularly interested in targeting please contact WA SeaNet Extension Officer

[Carl Bevilacqua](#) on (08) 9492 8811

Carl has been involved with, and organised numerous beach clean up's in the past 2 years and will provide you with advice and organisational support.

## AQUATIC HABITAT REHABILITATION

### Tide to Table Project – Cabramatta Weir Falls

## TIDE TO TABLE

RESTORING AQUATIC HABITAT

Tide to Table is funded by the Australian Government's [National Landcare Programme](#)



Photo: The redundant weir being removed and opening up fish passage.

photographed by Katie Cabezas (Project officer from Fairfield City Council). This species is an example of fish that will benefit from the weir's removal. Bullrout are not as common as other species like Empire Gudgeons and it is a good indicator of health to find them within the river. Bullrout can grow to 30cm in length and live in tidal estuaries and slow flowing freshwater streams like Cabramatta Creek. The species is classed as Catadromous meaning it will spend most of its time in freshwater and migrates to sea to breed, similar to Australian Bass. *(Note the dorsal, anal and pelvic spines all have venom glands that can inflict severe pain).*

A long term barrier to fish passage was partly removed last month in a Tide to Table project with Fairfield City Council in Sydney, NSW. The old redundant concrete weir formed a considerable barrier to migrating fish and with its removal a further 5.77 km of waterway was opened up. The 21 km long creek contains the largest freshwater wetland in the Georges River catchment in NSW, a population of 30,000 grey-headed flying-foxes (a threatened species), and two extremely dedicated and motivated environmental volunteer groups.

Congratulations to the Fairfield Creeks and Wetlands Group who recently won the Water Quality Monitoring Award in the Community Division of Sydney Water's Streamwatch Excellence Awards. Members of this group are involved in fish monitoring at the site and looking at the before and after changes to water quality and fish.

The bullrout (right) was



Photo: bullrout (*Notesthes robusta*) seen while sampling on the river. Photo by Katie Cabezas.

## Tide to Table expands into new territory in NSW

The Tide to Table model that has been successfully piloted in



Photo: Prawn Trawler on the Hawkesbury River. Healthy aquatic habitat and good water quality are both vital for this industry.

the Sydney Metropolitan area is due to start in the Hawkesbury Nepean and Hunter Central Rivers CMA regions in early 2007. The project, running over three years will involve a targeted round of National Landcare Program funding to private landowners, community groups and or local, state government bodies and will again concentrate on restoring fish habitat. The project involves working with the NSW Farmers Association, NSW Food Authority as well as the Catchment Management Authorities, NSW Department of Primary Industries (DPI) and the local seafood and

aquaculture industry. A new officer is being employed and some interesting fun educational activities are also planned so keep an eye out. Project ideas are welcome, related to water quality or fish habitat between Pittwater and Laurieton should anyone have any potential habitat problems requiring attention. Contact [Simon Rowe](#) (02) 9660 2262 for more information.

## Demolition order: "A hidden hideaway" ... "surrounded by nature" ... "buyers delight".

The problem of illegal clearing and tenancy of estuarine wetlands is a common and mostly underestimated cause of damage that can potentially lead to major loss of ecological wetland functioning. The picture (below left) was taken from the Georges River where a number of mature casuarinas were cleared, a structure constructed and an outside toilet erected. Unfortunately for the owners, being upon a Tide to Table restoration site this "humpy" was quickly removed by the staff and volunteers from the Georges River Keeper Program.

On the Hawkesbury River a similar, but in some cases, more drastic problem emerges when people find uninhabited land out of the way which would be a free perfect weekender or permanent address, with a few minor modifications. These minor works soon lead to more permanent structures by using old pieces of refuge, old motors, tires, bottles, ropes and before you know it the walking track becomes a floating walkway, and a bobcat's just installed a gravel driveway! Sound farfetched.... unfortunately its not. This type of unauthorised development can have a



Photo: A makeshift campsite on the Georges River where campers have chopped down trees.

devastating effect on aquatic habitat, which is ironic really as most people set up these camping spots as a base for fishing! Report suspected cases of damage to your local Department of Environment and Conservation Office or local Council.

Click the link for more information on [Tide to Table](#)



Photo: A makeshift jetty on the Hawkesbury River

## AQUATIC HABITAT PROTECTION & ENHANCEMENT

### Education and events

#### The OceanWatch Trailer – out and about

Mooloolaba Seafood Festival September 2006 Mooloolaba, Queensland

OceanWatch Australia (OWA) recently participated in the Mooloolaba Seafood Festival. This was a brilliant opportunity to show the locals how fishers are embracing new ideas and technologies that allow for more environmentally friendly fishing practices. We also talked to locals and fishers about protecting fish habitat in QLD and about our highly successful programs such as Tide to Table and Aquatic Habitat Protection Program which help to protect and rehabilitate fish habitat in NSW.



Photo: The OWA Trailer on display at the Mooloolaba Seafood Festival



Photo: Monique and Kate at the Eden Whale Festival.

#### Eden Whale Festival November 2006 – Eden, NSW

OWA also participated in Eden Whale Festival for our third year running! It was great to see all the friendly familiar faces at the festival. We spoke to locals and fishers about numerous issues impacting on fish habitats including the proposed [Batemans Bay Marine Park](#) and new gear types that help reduce bycatch such as the revolutionary T-90. We also gave away hundreds of posters about protecting fish habitat, titled [“A Vision For Sustainable Floodplains”](#).

#### New Sponsor – New trailer!

OceanWatch Australia has just been successful in gaining Coastcare

sponsorship from Hanson to construct a new educational display trailer. The original trailer was getting so much work in South East Queensland,



that we decided to leave it up there so that it could continue to be used at various seafood festivals. The Hanson sponsorship will allow OceanWatch Australia to create a new and improved trailer and it will start to be seen out and about in NSW in the new year.

## Environmental advice

### Providing advice – “Replacement Flows Project”.

OceanWatch Australia (OWA) provides advice to governments and other NRM stakeholders about issues that threaten or impact on the sustainability of Australia's fisheries. OWA has recently been involved in the Western Sydney Recycled Initiative: Replacement Flows Project, which proposes to substitute advanced treated tertiary effluent for environmental flows in the Hawkesbury-Neapean River. Click on the link for a copy of our [submission](#) to the NSW Department of Planning.

OWA also provided comments on the [Draft Illawarra Regional Strategy](#), and the [Draft Zoning Plan for Batemans Bay Marine Park](#). Copies of our [submissions](#) are available on our website.

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## OTHER NEWS

### SeaNet is Expanding

OceanWatch Australia is just about to appoint two new SeaNet Officers. Thanks to extra funding from the Natural Heritage Trust new SeaNet positions will be established in South East Queensland and Tasmania. The positions will be based with Queensland Seafood Industry Association and the Tasmanian Fishing Industry Council respectively. We will introduce the new recruits in our next issue.

Also, Louise Smith our SeaNet Officer in South Australia is leaving us to travel overseas for a year. We will miss her from the team and wish her the very best on her travels.



Photo: Louise  
– London  
bound.

### Board update

At the December OceanWatch Australia Board meeting Brad Warren and Peter Neville were appointed as Chair and Deputy Chair respectively. Brad Warren is a professional lobster fisherman from Newcastle NSW and Peter Neville is a former Deputy Director – General of the Queensland Department of Primary Industries and Fisheries. OceanWatch Australia would like to thank John Corkill the retiring Chair for his efforts over the last three years.

### Christmas wishes

Our head office will be closed on 22 December 2006 and will re-open on 8 January 2007. We would like to wish you all a very happy Christmas and prosperous new year.

For more information on OceanWatch Australia and its programs visit [www.oceanwatch.org.au](http://www.oceanwatch.org.au) or call us on 02 9660 2262