

SEA NET

smarter fishing for industry

SeaNet Wins National Award!

Well, we finally did it! After six years on the job, SeaNet has at last received national recognition. July 3rd saw the gala dinner presentation of the United Nations (Association of Australia) Environment Day Awards at the Sofitel Hotel in Melbourne. Ocean Watch Australia won the prestigious Excellence in Coastal and Marine Management Award for the SeaNet Extension Service. Receiving the Award, Anissa Lawrence (Executive Officer, Ocean Watch) went on to thank the SeaNet team (past and present) and Australia's fishers for their effort and dedication to environmental sustainability.

In another win for SeaNet, Claire van der Geest (SeaNet SA) took away the 2005 SA Seafood Fishing Industry Future Environment Award for her project developing and extending strapless bait cartons in the SA rock lobster fishery. Winning these awards, not only provided a great night out, but acknowledged the value of SeaNet's work and confirmed the status of Australia's fishing industry as accomplished stewards of the sea.



Anissa Lawrence (Executive Officer, Ocean Watch), Jim Newman (SeaNet Officer, Victoria) and Emma Bradshaw (SeaNet Program Manager) with the award.

Fisheries Research and Development Corporation (FRDC) Funds Square Mesh Codend Extension Project for Queensland Trawl Fishery.

The FRDC are funding an extension project through SeaNet in Queensland to inform trawler operators and net makers about square mesh codends. The project is a collaborative effort between the Queensland DPI&F, SeaNet and Ecofish, a non-profit regional economic development cluster representing the seafood and marine industry in Far North Queensland.



Natural Heritage Trust

Helping Communities Helping Australia

An Australian Government Initiative



Figure 1. This square mesh codend was used in a research charter in the Queensland scallop fishery in 2002. The 12mm polyethylene rope was used to take the weight of the catch, reducing knot slippage and distortion. The squares were 50mm x 50mm.

Recent research has shown that square mesh codends can be very effective at reducing bycatch and regulating the size of target species such as prawns and scallops. Diamond mesh codends used by the majority of trawler operators close up whenever the net is under any appreciable load, but square mesh codends remain open and allow bycatch (i.e., small fish, invertebrates) to escape. By regulating the size of the square meshes, the selectivity of the prawns and scallops can also be controlled more effectively.

Figure 2 shows the effect of a 100mm (50mm bar x 50mm bar) square mesh codend on bycatch catch rates in the Queensland scallop fishery. When the square mesh codends were used with

a turtle excluder device (TED), bycatch was reduced by 78% compared to a standard net codend with no TED. Importantly, there was no reduction in the catch rate of legal sized scallops, but the catch rate of undersize scallops was greatly reduced. The small scallops passed through the square meshes, remaining on the sea floor.

The extension project has constructed several square mesh codends for prawn and scallop fisheries and is lending them to fishers for trialing, free of charge. Project staff are also providing advice on how to manufacture and install the devices. If you are interested in trialing a square mesh codend in your prawn or scallop fishery on the east coast, contact the following project staff.

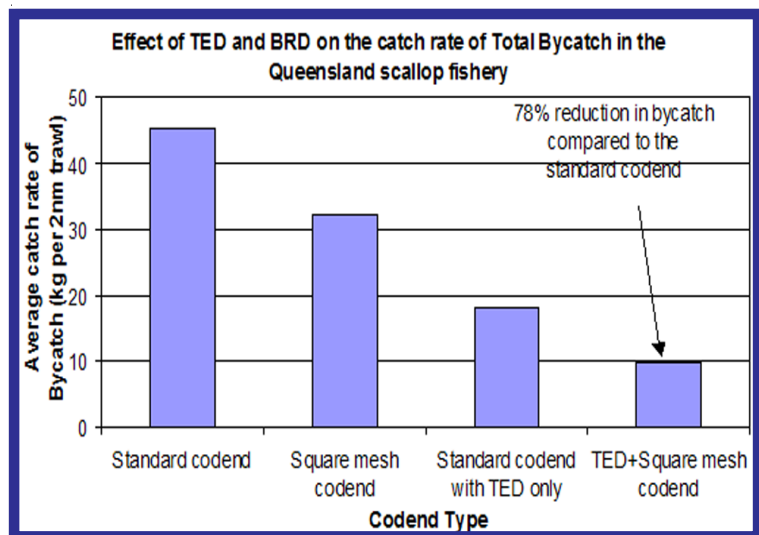


Figure 2. The effect of different codend types on the catch rate of bycatch in the Queensland scallop fishery. The bycatch includes all species that are discarded, including sharks, rays and sponges. Bycatch was reduced by 78% when the square mesh codend and TED were installed in same net.

- Denis Ballam - Queensland SeaNet Officer, Cairns. Phone: (07) 4032 2234, e-mail: burbrook@bigpond.com
- Ryan Donnelly, Executive Officer, Ecofish TNQ Ltd, Cairns. Phone: (07) 4040 4444,
- Matthew Campbell or Tony Courtney, Queensland Department of Primary Industries and Fisheries. Phone: (07) 3817 9591 or (07) 3817 9582, e-mail: matthew.campbell@dpi.qld.gov.au or tony.courtney@dpi.qld.gov.au.

EMS Gaining Momentum

Over the years, continuous improvements to fishing techniques and practices have been implemented by fishers searching for ways to improve their profitability and sustainable use of the resource. In many instances, these improvements remain the intellectual property of those who developed the modification. Now, more and more fishers are looking to adopt an Environmental Management System (EMS) as a means of documenting their practices and a way of educating the broader community about their industry.

Many environmental improvements in operations rely on the initiative, time, effort and funding of individual fishers. The Department of Agriculture, Fisheries and Forestry has developed a scheme, managed by Centrelink which aims to offset expenses that often limit changes in practice. The EMS Incentives Program encourages the adoption of sustainable management practices by providing primary producers with a cash reimbursement of up to 50% of the cost associated with developing and implementing an EMS. The maximum reimbursement payable under the program is \$3000.



Floating bag oyster cultivation on Wonboyn Lake. Wonboyn Oysters Pty. Ltd. used EMS as a means of documenting major infrastructure changes removing tarred and treated timber.

Whilst the main impetus to adopt an EMS is to improve operations and document practices to inform the

community, the incentives scheme has provided the “carrot” to increase interest from fisher’s statewide. SeaNet NSW is currently working on completing EMSs’ covering estuary general fishers operating on Wallis Lake on the Mid-North Coast and individual oyster growers on the South Coast. Due to the high levels of interest shown, SeaNet will be expanding its involvement and looking to cover estuaries throughout NSW with the aim of producing informative brochures for each fishery to supplement larger EMS documents.

For more information on EMSs’ in NSW contact Dave Cranston on 0427 592 875, e-mail: davec@oceanwatch.org.au or visit the Seafood Services Website <http://www.seafoodems.com.au/>

Lakes and Coorong Fishers Assess Bycatch

The Lakes and Coorong fishers, through their association “*The Southern Fishermen’s Association*”, are world leaders in environmental awareness and mitigation activities. Due to the location of the fishery within RAMSAR and National Park sites, the fishers have been active in implementing best practice technologies and practices in their fishing activities.

The fishers have initiated and are involved in a number of other environmental programs, including monitoring wader bird populations and assisting in the control of feral populations. The data which fishers have collected on wader birds in the Lakes and Coorong area is considered to be of high scientific quality and is being used by scientists for assessments of these populations. Full

credit must go to the fishers for their commitment to the sustainable use of all natural resources in the region.

In keeping with the outstanding environmental performance of the fishery, the FRDC announced in May, that they would fund a two-year project: *“Gear interaction of non-targeted species in the Lakes and Coorong commercial and recreational fisheries of South Australia”*. This project will quantitatively assess bycatch rates in both recreational and professional fisheries of the Lakes and Coorong.

The fishers will work in association with the South Australian Research and Development Institute (SARDI). The objectives of the project are to:

- assess the composition, magnitude and rate of retained and discarded catch in the main gear used in the fishery;
- identify mechanisms for reducing bycatch in these gears; and
- develop potential bycatch performance indicators and reference points.

The fishers will be collecting information as part of their “normal” fishing operations and SeaNet will assist in the field. This project will help the fishery to measure the impact, if any, of the fishing gear on bycatch and the catch of undersized commercial species, with the results being used to update the EMS and Codes of Practice for the fishery.

For further information on this FRDC project, the Lakes and Coorong Fishery, or other SA projects, contact Claire van der Geest on 0429 984 323 or e-mail seanet3@safic.com.au.

Lakes and Coorong Fishery Fast Facts!

- ★ *Four times winner of the SA Seafood Industry Environment Award (1997, 1999, 2001, 2003).*
- ★ *Winner of the SA Great Regional Science and Environment Award.*
- ★ *Finalist 2003 Australian Seafood Industry Environment Award.*
- ★ *The first fishery in the world to implement a whole of fishery Environmental Management System.*
- ★ *The only Australian fishery operating in a RAMSAR and National Park site.*

Whale Disentanglement Training

Victorian Rock Lobster fishers have recently taken steps to reduce the risk of entanglements in Rock Lobster pot ropes. The growth in whale populations visiting our shores suggests that entanglements in fishing gear may continue to occur, despite industry’s best efforts. Victorian Fisheries and Wildlife officers recently participated in a refresher training exercise for disentanglement operations at Port Fairy.

The training provides an opportunity to practice the skills, teamwork and communications required to successfully disentangle whales. Procedures include approaching the whale in a small inflatable dinghy accompanied by a larger ‘mothership’ vessel. The exercise was organised by Flora and Fauna Management Officer Mandy Watson and included DPI Fisheries Officers and Department of Sustainability and Environment Wildlife Officers from the South West region. The program uses the ‘kegging’ technique, where floats are attached to the whale to increase drag and tire the animal, allowing for a safer approach and removal of the entangling material.



Rescue team cutting free entangled ropes and buoys from the training drogue.

It is hoped that further training workshops will be held in the summer months with the opportunity for fishing industry involvement. SeaNet will seek to rally commercial fishers interested in the program to attend and improve their understanding of the theory behind disentanglement operations, with the potential for future involvement in support roles for entanglement responses in their region.

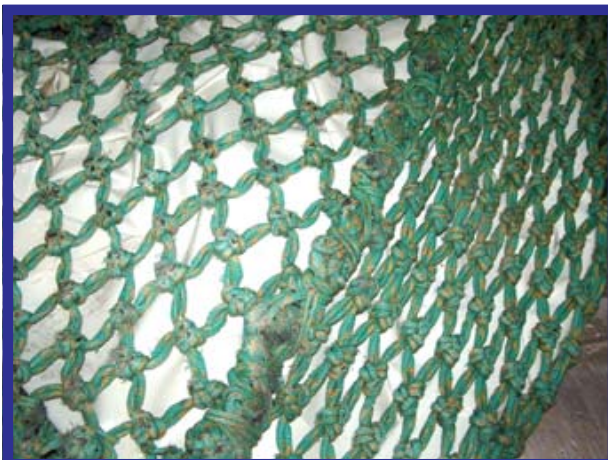
responded quickly by calling on fisheries officers to initiate disentanglement procedures. In this instance, the officers successfully used the fishing vessel and the skippers handling skills to cut free the obstruction in a cooperative effort. More information contact Jim Newman on: (03) 9824 0744 or e-mail: seanet@siv.com.au.

In a recent entanglement event that also occurred near Port Fairy, a commercial fisherman

South-East and Great Australian Trawl Bycatch Reduction - Update

SeaNet's promotion of industry uptake of modified gear for bycatch reduction (FRDC Project 2001/006) has led to significant interest in the rotated mesh approach, dubbed "T90" by fishing gear technologists.

Feedback from the last edition of SeaNet News revealed a wealth of information about the selective properties of the T90 approach to improving trawl gear selectivity and fish quality (for more information go to www.sintef.dk/ and click the projects icon). This feedback is being used to continue promoting effective bycatch reduction measures in the South-east and Great Australian



Close-up showing a seam where the T90 panel is joined to the codend, note how the meshes are held open.



South-east trawl fishers with a modified T90 panel codend.

Bight Trawl Fisheries by providing industry with the information needed to make bycatch reduction strategies commercially viable.

The project has identified potential benefits of using areas of mesh in nets that are turned 90° (i.e. T90) from their ordinary orientation. This approach was first used in Australia as a means to retain the selectivity benefits of square mesh panels while reducing the waste of net material and making installation easier. The first T90 panels also proved to have better load-bearing characteristics than square mesh panels which would often stretch and distort, becoming ineffective.

In other countries, the T90 approach has been incorporated into the extension part of the codend rather than the 'bag' as trialed in Australia. Early scientific assessments and anecdotal information from industry suggests this approach credits further investigation. More information contact Jim Newman on: (03) 9824 0744 or e-mail: seanet@siv.com.au.

SeaNet Attends IFF3



The Third International Fishers' Forum (IFF3) in conjunction with the International Tuna Fishers Conference on Responsible Fisheries is underway in Yokohama, Japan from July 25–29. The U.S. Western Pacific Regional Fishery Management Council is co-hosting the event with the Organization for the Promotion of Responsible Tuna Fisheries (OPRT), Japan Fisheries Agency, Japan Fisheries Association, Hawaii Longline Association, and the National Oceanographic and Atmospheric Administration (NOAA) Fisheries.

The scope of the joint meeting is broader than the two previous Fishers' Forums, which focused on abating seabird and sea turtle bycatch in longline fisheries. Current discussions will incorporate strategies for sustainable fisheries, shark fisheries, fishing capacity, production, and marketing, consumption monitoring and illegal, unregulated and unreported fisheries.

Dave Kreutz, ETBF Officer is attending the Forum, thanks to the generous support of the Eastern Tuna Management Advisory Committee (ETMAC). This will not only allow Dave to gather the latest international bycatch information for integration into the Australian industry, but provides the opportunity to showcase the world leading progress that the ETBF has made since IFF2 in Hawaii in November 2002. Dave will produce a report on the most valuable outcomes of the Forum which will be made available on the Ocean Watch/SeaNet website. For more information visit the official IFF3 website at: <http://www.fishersforum.org>.

Fisheries Co-Management Council's Guidelines for Codes of Practice

The Fisheries Co-Management Council (FCC) has recently approved a set of guidelines for the development and implementation of Codes of Practice in the fishing industry. These guidelines recommend a process for a fishery association or business to develop and implement their Code of Practice. Satisfying the guidelines will provide a substantial foundation for industry groups to do so. The guidelines include descriptions of process steps such as Initiation, Research, Planning, Development, Complaints, Piloting, Review, Publishing, Promotion and roll-out, and Education. The guidelines ensure that appropriate supporting documentation is produced, processes described and responsibilities allocated to make the Code a living document.