

# BYCATCH BYLINES

Issue 05 | April 2013

HEADLINE



## Top designs for trawler tori lines

Almost a year ago, the *Ocean Guardian* newsletter talked about work on improving tori lines and bird bafflers used on trawlers  $\geq 28$  m in overall length. The results are out, and soon faded spaghetti will be a thing of the past.

Since April 2006, the deployment of 'seabird scaring devices' has been legally required on trawlers  $\geq 28$  m in length. Over the past 6–7 years we've learned a lot about these devices, both good and bad. Without doubt, tori lines are the best known device for preventing seabird strikes on trawl warps. But, they can get wound around gear, tangle, blow off course, break, fade, and sag into the water, reducing any mitigation effect.

To help sort out these issues, a series of trials was conducted at sea on a Sealord Group vessel. Trials tested different tori line designs and constructions to see how we can make tori lines work better. Testing involved five different towed objects, four backbone lengths, two streamer spacings, and four streamer types. Materials included those available in New Zealand and those in use in trawl operations overseas. The verdict was clear and the optimal line design still meets the current legal specifications. For streamers, Kraton was the best. It tangled least, hung well, and threaded into the backbone easily. It was also very visible at night, glowing in the vessel's stern lights.

Amongst the towed terminal objects tested, the trawl float was best. The weight of the float needed will vary between vessels depending on trawl block height. Get rid of your pinkies! The float might be heavier, but it is much better for keeping tori lines tracking trawl warps.

For backbones, long is not necessarily better. Tailor your backbone to the vessel block height (see *What the FAQ?* below) and keep an eye on it to make sure it's not sagging heaps. Remember that if you're just using the tori line, it also needs to meet the legal spec, entering the water 10 m or more behind the warp.

Shortly, net sheds will be stocking exactly what you need to make a better tori line in a flash. Backbones will be pre-fitted with swivels to attach streamers to and Kraton streamer material will be available in coils. It'll be a little more expensive than pink spaghetti, but it will last a lot longer. It will also tangle less, break less, and keep its colour better because it's UV-protected. Pick up a trawl float of the correct weight (see below), and you're done—easy as.

Next issue, we'll look at how to improve bird bafflers.



Tori line with Kraton streamers – stronger, brighter and better than flimsy faded spaghetti! Photo: P. Fullerton

WHAT'S UP?



## Back from the dead

The New Zealand storm petrel *Pealeornis maoriana* was thought to be extinct for 150 years, until 2003 when a sighting was confirmed at sea. Then, no one knew how many there were or where they called home off the water. This summer, a research team searched at different islands—the Poor Knights and the Mokohinaus—before getting lucky on Little Barrier Island in the Hauraki Gulf. In February, these 'Jesus birds' (because they seem to walk on water) were seen at a breeding site for the first time. Now, the next big question is how many there are.



New Zealand storm petrel. Photo: © A. Borker

WHAT THE FAQ?!



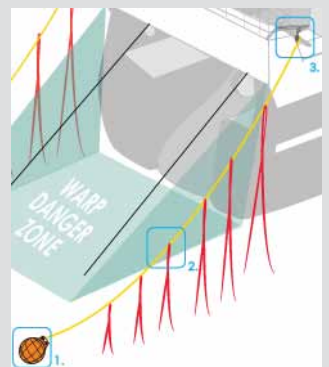
## Tori line fact sheets

The word on better trawl tori lines is captured in a new fact sheet from the DeepWater Group.

Here are the recommended dimensions. It's all about the height of your trawl blocks:

- Backbone length = 5 x block height (so 6 m block height means a 30 m backbone)
- Streamer number = 1 x block height (so 6 m block height means 6 paired streamers)
- Weight of the towed object = 1.2 x block height (so 6 m block height means a 7.2 kg towed object).

John Cleal can tell you more at [john.fvms@xtra.co.nz](mailto:john.fvms@xtra.co.nz)



A better tori line is as easy as 1-2-3. Image: © Ros Wells

## 'Giving nature a voice'

That's the mission of Forest and Bird. Karen Baird is one of those aiming to do this on a daily basis. She tells us about working at Forest and Bird (F&B), and her view of the future.

*What is your role at F&B and how long have you been there?*

I've been at Forest and Bird for about 2.5 years. I have two main work areas: assisting with promoting a Kermadec Ocean Sanctuary, and advocating for seabird protection. My seabird work involves a lot of time with international tuna commissions through BirdLife International. I've also recently been involved with the stakeholder group that developed New Zealand's draft National Plan of Action – Seabirds.



Karen Baird at the helm on the way to Niue. Photo courtesy of K. Baird

*What did you do before F&B?*

I worked for the Department of Conservation in Warkworth as Programme Manager for the Kermadec Islands. Before that, I ran my own wildlife and birdwatching tour company for nine years.

*How does F&B prioritise its marine activities and campaigns?*

It's usually straightforward. We have an executive team that is elected by F&B members. This team has input into the planning process. Issues that concern members are usually the same as those that concern staff and most are pretty obvious, for example, saving endangered species like Maui's dolphin and black petrel.

*What makes you look forward to going to work?*

I'm fascinated by seabirds—as a lover of the open ocean I totally appreciate their lifestyle choice! The ocean is a very challenging environment for seabirds though and the opportunity to work as an advocate for their protection drives me.

*What do you see as F&B's greatest strength, and weakness?*

Our greatest strength is definitely our membership of more than 70,000. Our weakness is resourcing—we have to prioritise our efforts in order to keep up with the many important environmental issues out there.

*What do you think is the biggest current challenge for New Zealand in the marine area? And the next big issue coming down the line?*

We need to make sure we don't trash the marine environment for short-term economic gain—if I can borrow Gareth Morgan's words, we must take care of New Zealand's 'natural capital'. We're still learning just what that is. Future ocean issues are many: mining and oil development, global climate change, the expansion of Chinese fisheries ... these threats have the potential to impact the oceans and, ultimately, us, significantly.

*What are the hardest parts of your work with F&B?*

There aren't really any hard parts. If I had to pick something, I'd say being away a lot, but working from home helps with balancing that. I do miss being in the field, and interacting with nature on a daily basis.

*Away from the office, what revives you and keeps you going day to day?*

I love walking my dog on the mudflats at Whangateau. Hiking is another passion, and I have a goal of doing one big tramp each year. Going out into the Hauraki Gulf with seabird-watching tours inspires me—it's a reminder how much people love these birds. Working with my husband on seabird projects is also great—including work on the New Zealand storm petrel. And, a bit of gardening rounds out my spare time.

Thanks Karen—it's good to hear more about what makes F&B tick.

## Bird brains to meet in France

In May, experts on seabird management from 13 countries will meet in France. The purpose of the meeting is to improve the status of 30 species of albatrosses and petrels around the world. More than half of these species occur in New Zealand. Reducing seabird bycatch in fisheries will be an important part of the discussion.

The meeting is among countries who are parties to the Agreement on the Conservation of Albatrosses and Petrels (ACAP). Meetings schmeetings you might say ... but ACAP has an important role in determining what New Zealand does for its seabirds. For example, ACAP makes recommendations on bycatch reduction measures, identifies population trends, and funds work contributing to seabird conservation and management. (In the past, New Zealand researchers received money from ACAP for the offal management work done on trawlers here.)

Hot items on the ACAP agenda this year include an update on new bycatch reduction measures, National Plans of Action for reducing seabird bycatch, best practice approaches to testing mitigation measures, and a look at tools to assist the science and practice of bycatch reduction (e.g. how to remove hooks from captured birds). In addition to longline and trawl fisheries, gillnet (set net to us) bycatch will also be discussed.

It will be a busy few days for the ACAP crew. However, the integration of international efforts helps protect New Zealand's birds when they roam overseas.



Beast of both worlds: a northern royal albatross takes off to sea from its nesting area at Taiaroa Head near Dunedin. Photo: © M.P. Pierre

## WANT TO KNOW MORE?

- *Headline?:* To get hold of reports on the tori line trials and the fact sheet, contact John Cleal [john.firms@xtra.co.nz](mailto:john.firms@xtra.co.nz) or Johanna Pierre [johanna@jpec.co.nz](mailto:johanna@jpec.co.nz). The final report is also available online at: <http://www.doc.govt.nz/publications/conservation/marine-and-coastal/conservation-services-programme/csp-reports/warp-strike-mitigation-devices/>
- *What's up?:* For tips on the bird and how to recognise the New Zealand storm petrel at sea, check out *A fisher's guide: New Zealand coastal seabirds*: <http://www.doc.govt.nz/publications/conservation/marine-and-coastal/conservation-services-programme/other-publications/a-fishers-guide-new-zealand-coastal-seabirds/>
- *World watch:* To find out more about what's hot at ACAP, go to: [http://www.acap.aq/index.php/en/advisory-committee/cat\\_view/128-english/15-advisory-committee/413-ac7](http://www.acap.aq/index.php/en/advisory-committee/cat_view/128-english/15-advisory-committee/413-ac7)

## FEEDBACK ✈️

To submit feedback or questions, please email: [bycatch.bylines@yahoo.com](mailto:bycatch.bylines@yahoo.com)