## The New Zealand Herald

Wednesday October 13, 2004





## Nets leave a trail of death in the sea

## 09.10.2004 - By CATHERINE MASTERS and MICHAEL RICHARDSON

It's quiet at the bottom of the ocean and dark where sunlight never reaches. But illuminate it with artificial light and strange life emerges. Translucent, glittery creatures with bulging eyes and oversized razor-sharp teeth. Crazy crabs with spikes. Pretty corals, odd-looking creatures such as a seafloor-dwelling octopus known as Dumbo because he looks like an elephant.

For New Zealand marine scientist Steve O'Shea it's heaven - species yet to be discovered and documented, mysterious bottom dwellers. "And before we've even described it, a bloody great net comes down and smashes it all to bits."

O'Shea is talking about bottom trawlers, commercial fishing boats with nets kilometres wide with heavy rollers which drop hundreds of metres, smashing coral and rock and dragging everything in their path, from ghost sharks to Dumbo to 1000-year-old corals. The trawlers sort through the haul, keeping the commercial fish such as orange roughy and chucking away the rest.

If O'Shea and other scientists and conservationists are to be believed, after the trawlers have gone the sea floor in their path is devastated and ecosystems wiped out. The fishing industry would have you believe O'Shea and company are greenies exaggerating the impact of their multimillion-dollar business. They say they target the schools, keeping damage minimum.

Bottom trawling is the big issue in international environmental circles. The sides are poles apart. There is no middle ground.

In August this year New Zealand scientists were among more than 1000 from 69

countries who signed a call for a moratorium on bottom trawling on the high seas. They are begging for time to make the discoveries and consider the longterm impact before it is all destroyed. The United Nations is set to debate it in coming weeks.

This week the Deep Sea Conservation Coalition again appealed to the United Nations, claiming 95 per cent of the matter in hauls was thrown back. But New Zealand's Seafood Industry Council says a ban would be devastating to a \$1.2 billion industry with \$800 million coming from exports from species caught by trawling and related methods.

New Zealand is surrounded by an area of water known as the Exclusive Economic Zone (EEZ). Within this area there are rules and quotas. Outside, in international waters, there are no rules. A bone of contention, inside and outside the zone, is the underwater mountains known as seamounts - spectacularly diverse in life and a spawning ground for many species.

International standards define a seamount as an underwater structure rising 1000m or more above the surrounding terrain. That definition has become more generalised and takes in smaller features.

The fishing industry says it hardly fishes true seamounts in New Zealand waters but fishes the smaller bumps and knolls.

A study by Niwa, the National Institute of Water and Atmospheric Research, says 80 per cent of seamounts at depths of 500 to 1000m have been fished, adding that the fisheries have become more focused on seamounts. In 2001 bottom trawling was banned on just 19.

Malcolm Clark, study co-author, refuses to be drawn into the debate but says Niwa has found an "incredible" variety of life on anyone's definition of a seamount. That's only seamounts. The world is just beginning to learn about deep-sea coral and fish reefs.

Clark says, "The most effective way of catching bottom-associated fish like orange roughy is with a trawl that sits on the sea floor and basically herds the fish between the top of the net and the sea floor so there's nowhere to escape. That, of course, catches other unwanted species."

Greenpeace in New Zealand says because fish stocks are so depleted fishers are heading more into international waters.

In June Greenpeace headed to the north-western ridge of the Challenger Plateau, off the west coast of New Zealand, in international waters known for orange roughy trawling. They found seven boats, six from New Zealand. In Greenpeace style, they inspected the fish in the nets hauled up, taking photographs and collecting bycatch spat out through the waste chute. They say the hauls were full of deep sea creatures, including a piece of endangered black coral.

Oceans' spokeswoman Carmen Gravatt says only one net had a majority of orange roughy.

"Only about 0.2 per cent of the global fish catch which comes from high seas bottom trawling. That's not feeding the world ... New Zealand is one of 11 that are taking 95 per cent of the catch from the high seas."

Others say it is half the global catch and that 40 or more countries bottom trawl.

A Timaru trawler is scathing of Greenpeace. Trawling harms the bottom a bit, says Gordon Kenton of Kenton Trawling Co. "But it's 1000m under the ocean. What harm is it doing if it's not absolutely wrecking it. Who's going to see? It's not hurting anything long-term."

His boat fishes off the north-west Chatham Rise within the New Zealand exclusive economic zone, towing only on the flat while others tow in the hills and valleys. It is a vast area with only one to two dozen trawlers fishing the area, and they are not all there at once.

Vast is right. The EEZ stretches about 4 million sq km compared to the New Zealand land mass of 268,000 sq km.

George Clement, chief executive of the Orange Roughy Management Company, says the fishing industry's footprint on the sea floor is small.

He is adamant in the New Zealand waters they do not fish seamounts, those 1000m or higher, saying many are inaccessible or too steep or do not have the commercial fish they are after.

But they do fish some of the smaller hills and valleys, comparing it to fishing Mt Eden in Auckland as opposed to Mt Ruapehu.

He says the very large nets, cited by Greenpeace, are not used for bottom trawling as they would be ripped to shreds. Bottom nets are not more than 10m wide and 50m long. He admits bottom trawling has an impact but reckons less than 5 per cent of the world's 75 per cent of ocean would be impacted.

"It would be a bit like going into the McKenzie Country and looking around at this wonderful untouched, unspoiled area and then seeing somebody had dug a

vegetable garden and it was growing brussel sprouts."

The industry was prepared to make changes where required - but would not respond to hysteria.

Other fishermen are worried. "The fish are disappearing, all right," said one who did not want to be named.

Another fisherman talked of technology with scanning equipment on boats which build a three-dimensional image of where the fish were."There is nowhere the fish can hide now. I'm sure we'll have to destroy the fisheries before we learn the lesson."

Marine scientist Professor Daniel Pauly, from British Columbia University, who has visited New Zealand, talks about the rise of slime. When ecosystems such as those on seamounts or reefs are destroyed the bottom becomes muddy. Every storm stirred it up and only small organisms survive.

"You encourage the growth of short-lived animals, most of which are microbial and jellyfish and so on. Short-lived algal blooms, all these things are part of the rise of slime and the ultimate fact there is that you have such algal blooms and when they die they consume all the oxygen and you get a dead zone."

Dead zones, he says, are the ultimate stage of over-fishing, destruction and pollution.

He describes bottom trawling as, "It's like you want to weed your garden and you use a bulldozer. The topsoil is gone, the worms are gone, everything's gone."

The New Zealand Government is stuck in the middle. Fisheries Minister David Benson-Pope acknowledges the practice is damaging and an issue that had to be addressed at home and internationally.

The Government's recommendation to the UN is to implement interim bans on bottom trawling in vulnerable areas. With Australia, it is looking to protect parts of the mid-Tasman.

For Greenpeace and Steve O'Shea, it is not enough. Remember Dumbo, the octopus, says O'Shea. There were nine species of Dumbo in New Zealand waters but four are already effectively extinct - because of bottom trawling.

## ©Copyright 2004, NZ Herald