

Plenty more high-priced fish in the sea?

The lucrative Antarctic toothfish is an environmental battleground. Some say we are killing too many. Others say it is being managed properly. But how can you tell when it lives two kilometres under the Antarctic seas? **John McCrone** reports.

HERE we go again. Who is telling the truth? The greenies or the industry? The Ross Sea off Antarctica is the world's last intact marine ecosystem, a place where whales, seals and other top predators, like the gargantuan Antarctic toothfish, can still be found in their natural number.

Think of it. A whole planet and this is now about the only place scientists can go to study the intricate web of life in all its undisturbed glory.

Yet for about a decade, under the guise of an "exploratory" research fishing operation, the New Zealand fishing fleet has been down there quietly making a mint. The toothfish – a gourmet dish so expensive it is only served in the restaurants of New York, Tokyo and Paris – is being hauled out of the frigid waters by the tonne.

Slow to reproduce, the toothfish takes 10 years just to reach a size where it is able to spawn. The adults

that end up on the slab, caught by trailing 20,000 squid-baited hooks at ocean depths of up to 2 kilometres, are man-sized monsters which can live more than 40 years. However, 100,000 fish are being taken from the water in an eight-week season.

"It's the conservation crime of the century," says Christchurch documentary maker and wildlife campaigner Peter Young.

"It's crazy to fish a species that takes so long to replace itself. And they're destroying this great natural asset, not for the sake of feeding thousands, but to feed a very wealthy and select few."

Antarctic scientists have reason to think the toothfish population could be on the brink of collapse.

Art DeVries of the University of Illinois, who has been catching, measuring and tagging toothfish through holes drilled in the ice of McMurdo Sound since the 1960s, says he used to be able to pull out big adult fish by the handful anywhere.

"We would catch a few hundred. And 50 to 55kg fish were common.

"There were even bigger, but they could straighten out our hooks."

But the past few years? "Nothing," Dr DeVries says. This summer, he and Auckland University marine biologist Clive Evans put out a line for three weeks. The bait was not even touched.

Dr Evans says they believe the toothfish population has contracted to the slopes further out to sea.

"We're fishing at the edge of their range in the shallower water and their best feeding grounds are out where the fishing vessels find them. As you reduce the central population, you reduce the competition and so they must have all retreated back there."

Mr Young says this could be the red flag warning of an imminent population collapse. He says we criticise the Japanese for their "scientific" whaling in Antarctic waters, yet, perhaps because the toothfish is so ugly, and also because it is earning our country useful export dollars, we are turning a blind eye to our environmental misdeeds.

Mr Young is working on an independent documentary, *The Last Ocean*, which he hopes will prick the public conscience if he can get it before worldwide film festival audiences later this year. The last bit of taping will be a trip overseas to confront customers with the truth of what they are eating, he says.

And with New Zealand's Sealord and other companies applying for an official "sustainable fishery" stamp, paving the way for even greater exploitation of toothfish, Mr Young feels the word has to get out before it is too late.

But what is the truth of the story? Whether it is inshore fishing and Hector's dolphins or cow barns on the Mackenzie Basin, we seem to be getting more and more polarised clashes between conservationists and commercial interests.

So here we go again. Just how threatened is the toothfish, really?

IT STARTED with the Patagonian toothfish. In the early 1990s, some marketing whiz had the clever idea of renaming this warmer-water relative of the Antarctic toothfish the Chilean sea bass. Given a more appealing name, the Patagonian toothfish became an immediate hit with the yuppie restaurant trade.

Sealord's international fishing manager, Ross Tocker, says the flesh of either toothfish is quite bland. However, being particularly oily and moist, the meat picks up the flavours in cooking, making it prized by chefs and the highest priced white fish on foreign menus.

Just to buy toothfish from a New York fishmonger might set you back NZ\$55 a kilo, which is why it is virtually unheard of on the Kiwi dinner table.

With such good returns from the

Patagonian toothfish, the New Zealand fishing fleet naturally cast its eyes toward the almost identical species found further south.

Fishing off Antarctica is a challenge. With the icebergs, the minus 10 degree Celsius summer temperatures, and the week-long journey just to get there, it demands special boats and a lot of fuel.

The boats have machines which can bait four hooks a second. But with 20,000 hooks and 13km lines to tow, it can take seven hours to make a single haul. And the biggest toothfish weigh up to 150kg, so line tangles are common. However, with the potential catch easily justifying the multimillion-dollar investment, the only question was whether the fishing would be allowed.

New Zealand owns the fishing rights up to 200 nautical miles out from its coastline, including its offshore islands. To ensure a sustainable harvest from our fisheries, the Government uses a quota system where the annual catch for each species is determined by population numbers.

National Institute of Water and Atmospheric Research (Niwa) fisheries researcher Stuart Hanchet says this does mean some species are fished quite hard. Hoki, for example, is allowed to be fished down to a third of its natural numbers.

But he says this has been modelled as the level that will produce the best biomass yield. "The fish will be faster growing because there is less competition for food. They will also be able to put more energy into reproduction."

It is a farming approach applied to the high seas. And despite some quota system disasters like the orange roughy, generally even fishing industry critics such as former Forest and Bird expert Barry Weeber say the New Zealand regime

has proved "the least worst".

The waters of the Antarctic are technically unowned. New Zealand in fact has a historic claim to the Ross Sea as part of the Ross Dependency, a chunk of Antarctica we once stuck a flag in. Many feel if the area is anyone's, it is ours.

But all such territorial claims to the Antarctic region have been set aside since the 1960s and the region is administered by international committees like the Hobart-based Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR).

With the backing of the New Zealand Government, which was keen to develop the \$1 billion a year fishing industry, a permit request was put in to CCAMLR. Mr Weeber says the New Zealand fishing companies were smart enough to promise to fish on a precautionary basis, starting small-scale and doing their own tagging-and-release research to establish fish numbers.

It was also argued a New Zealand presence would prevent the Ross Sea being taken over by pirate fishing vessels, which had already pushed unpatrolled parts of the Patagonia toothfish range to near collapse.

THE FIRST boat went out in 1997 and the Antarctic toothfishery quickly grew to four vessels, two owned by Sanford and operating out of Timaru, another two jointly owned by Sealord and Talley's, based in Nelson. But soon other countries arrived: Russia, Britain, Uruguay, Spain and this year, four vessels from Korea.

Sealord's Mr Tocker says the fishery is run on an olympic system - a set quota and an annual race until the limit is reached, which makes it highly competitive.

Yet all the boats operate under