seals, they are yet to be used in everyday hoki fishing, and Richard Cade says they may never be. He says the future safety of fur seals, in the hoki fishery at least, will probably rest with individual skippers and a code of practice.

'That's not good enough,' says Forest and Bird's senior researcher Barry Weeber. 'I don't think a code of practice is going to work. In reality, it's the same code of practice that's been around since 1989, and all it's achieved is better gear deployment.' He says the industry has to try harder. 'We think the industry's been very slow; they could have been more proactive than they have been.'

Nevertheless, fishers point to the fact that fur seal bycatch has been coming down in recent years, but that trend comes with a caveat — so has the overall fishing effort. The total allowable commercial catch for hoki has fallen from 250,000 tonnes in 1997 to 180,000 last year. That means fewer trawls and, quite simply, fewer 'seal/vessel interactions'.

In all, the National Institute of Water and Atmospheric Research estimates that around 12,000 fur seals have died as fishing bycatch in trawl and longline fisheries between 1990 and 2000.

Nobody knows whether this is hurting the fur seal population as a whole, because it is simply not known how many there are. A census in the early 1970s estimated a national population of 39,000 animals, but

many have questioned the accuracy of that survey and nobody has attempted one since.

Barry Weeber says hard evidence shows fur seals are making a strong comeback at the Bounty Islands, and casual observation reports smaller gains in Otago,

Marlborough, Nelson, and Wairarapa. He says there are probably at least 60,000 seals around our coasts today.

But for the big rookeries in Fiordland, the Antipodes and Stewart Island, not much has changed in the last 20 years.'

omething has definitely changed along the West Coast of the South Island, next to the Hokitika Canyon hoki fishery. Long-term studies of breeding rookeries at Cape Foulwind, near Westport, and at Wekakura and Taumaka on the Open Bay Islands show that pup births are falling further every year, as are pup weights and survival. The rookeries are shrinking.

Hugh Best of the Department of Conservation says that the fishery is responsible for the deaths of adult females that still have dependant pups ashore. That puts the rookery under pressure, but the knockout punch, he says, comes when bycatch coincides with an El Nino year.

When the immense climatic contradiction known as the El Nino Southern Oscillation kicks in, strange things happen at sea. Fur seals make the long journey to their feeding grounds to find the huge schools gone.

Cold water holds more nutrients than

warm. When El Nino drives cool waters before it, the fish go with them, moving further south or simply swimming deeper, beyond the seals' reach. The thermal inertia of water means it can take months to return to normal.

After an El Nino, Best noted that pup condition and survival plummeted as their mothers returned with empty stomachs. Furthermore, females vary as to when a blastocyst — a pre-embryonic cluster of cells can be implanted in the uterus and there's good evidence that a stressed cow may not bear young the following season.

To understand the impact of this we need to know more about fur seals' fidelity to their home rookery. We know that they travel vast distances — more than 750 kilometres — between breeding seasons. But if they remain loyal to their natal rookery, the West Coast colonies could conceivably fail altogether if not topped up by immigrants.

Elsewhere, fur seals have come under fire, sometimes literally — from some fishers who insist that they compete for valuable commercial species and must be controlled. An outspoken proponent of a fur seal cull is the managing director of Talley's Fisheries, Peter Talley.

He maintains an 'exploding' seal population is ransacking fish stocks, taking 300,000 tonnes — more than the total commercial take — every year, including

