



It is estimated that anywhere between 300,000 and 700,000 seabirds are killed a year because of plastic garbage. This black-backed gull died from starvation after becoming stuck on a "six-pack" holder.

ghastly consequences.

Seals and sea lions have been observed from Campbell Island and the Auckland Islands to as far north as Banks Peninsula with lengths of netting about their necks. At the Auckland Islands, a young sea lion was spotted with about three metres of monofilament line and swivels, thought to be from a squid jigger, wrapped so tightly around its neck that the skin and subcutaneous tissues were severed.

Anecdotal evidence from the United States is gruesome. "I observed a sea lion with a net fragment so deep in its tissues that the net had cut through skin, blubber, and muscle and had actually cut open the trachea," Rich Tinney of the Centre for Environmental Education told a congressional committee. "The animal was incapable of diving for food because water would enter its throat through the opening cut by the net."

Whales and Dolphins

Whales and dolphins have frequently become entangled in large set nets, but not in New Zealand because of the absence of this type of fishing here. However, the extensive use of floating synthetic buoylines on rock lobster pots and deep sea nets has resulted in the fouling of at least two whales in recent times.

In 1979 an orca was discovered by fishermen in a distressed state entangled in ropes and floats in the eastern Bay of Plenty.



The marine environment is not the only one to suffer from the effects of petroleum-based products. Tongariro High School students recently held a "nylon-a-thon" during which they recovered 3.6 km of fishing line nylon from rivers around their region. Their efforts raised \$200 which was donated to the Society.

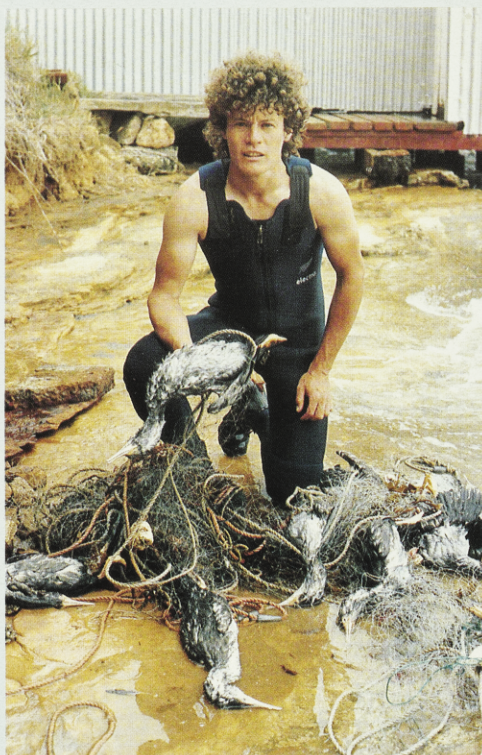
In February 1984 a 10-metre juvenile male southern right whale became stranded just north of Banks Peninsula. It died soon after stranding and was found to have a long length of polypropylene rope, with a small polystyrene buoy attached, wrapped around its tail. The rope had cut 20 cm into the leading edges of both flukes.

Around Banks Peninsula, gill netting is known to kill approximately 10-15 percent of the local Hector's dolphin population a year (see "The Down Under Dolphin" article page 30 this issue).

Turtles

Although turtles are uncommon visitors to New Zealand, they are not rare.

In the summer of 1979-80 six leather-back turtles reached the country, one of which beached itself near Whakatane. Soon after coming ashore the turtle died and a post mortem revealed the oesophagus packed with polythene bread bags. It is thought that turtles regularly mistake the bags for their favourite food, jellyfish.



Forest and Bird executive member, Graeme Loh, found 14 drowned spotted shags recently caught in a set net in Otago Harbour. If the fully protected birds had been shot the culprit could have been prosecuted, but as the law stands it is not illegal to leave such lethal unattended set nets.

No simple solutions

There are no simple solutions to the problem. However, a start has been made. In November 1984 a workshop on the fate and impact of marine debris was held in Honolulu and attracted participants from New Zealand, the United States, Japan, China, Canada and West Germany.

One approach is to work through the International Convention for the Prevention of Pollution from Ships (MARPOL). It contains a provision that prohibits "the disposal into the sea of all plastics, including but not limited to synthetic fishing nets and plastic garbage bags".

This has not yet come into force as only 27 nations have ratified it. However, it is not



The Cape Palliser seal colony and a seal with plastic strapping around its neck.

Photo. Mike Price, MAF.

expected to take long before it becomes enforceable.

In the United States a host of environmental groups have formed an association called the Entanglement Network, which sends out a newsletter and coordinates pressure groups to deal with the problem.

Of course, laws can only accomplish so much. In the final analysis, responsible housekeeping by everyone is the only way to avoid unnecessary death to wildlife, not only in New Zealand but throughout the world. 🐦

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More garbage than fish?

Marine researchers estimate that the amount of garbage placed in the oceans each year now outweighs the fish harvest by three to one. Much of the trash consists of plastic which will not rot.

The accumulation of plastic is already a hazard to marine life and the problem is getting worse. The state of California may soon take steps to ensure plastic containers are biodegradable.

One bill now before the state legislature calls for a survey by public bodies to determine the extent of damage. They will also be asked to make recommendations on the clean up of coastal waters.

Legislation has been introduced in the US Congress seeking better control over the disposal of plastics at sea. The measure would cut future dumping but not reduce existing plastic waste.

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