

Sadwrap

by
Liana Christensen



Photo Courtesy: Fisheries Dept.

Ghost nets drifting through the high seas, fishing and killing long after the trawlers have reached home ports: the unlikely plot for a new Steven Spielberg movie? No. It is the chilling truth about plastic debris in the ocean.

Prior to World War Two most fishing gear was made from cotton, hemp or flax - all of which disintegrate in a very short time. Since the war plastic has been ubiquitous. According to one source plastic waste is killing up to a million seabirds and 100 000 sea mammals each year. The number of fish killed every year is countless.

Wildlife officers from CALM recently spent two months trying to rescue a sealion which had a thick, blue plastic bait band cutting deep into its neck. In their line of work such sights are not uncommon, nor is it rare to find seabirds strangled by the plastic yokes used on six-packs of drink. W.A.'s Department of Fisheries is equally concerned about the problem. A report in the May 1987 issue of *FINS*, W.A.'s Fisheries magazine, was alarming. A 200-year-old leatherback turtle, rarely seen in W.A., was found floating in Jurien Bay by Gerry Stewart, the skipper of *Seafarer 11*. The turtle, which hadn't been dead for long, had a synthetic rope from a craypot wrapped around its head and front flippers.

On the 15th of April, 1987, a 3.2 m orca whale stranded on Australia's east coast at a place called Eden (bottom). According to K.R. Margus of the National Parks and Wildlife Service, N.S.W., an autopsy revealed its stomach contents as two plastic bags and fragments of a third plastic sheet. (below).



Margaret Collins/Courtesy N S W N P W S





Liana Christensen

One day late in October I visited the new Hillarys Marina with supervising wildlife officer Doug Coughran. Within an area less than two square metres we picked up the plastic rubbish shown in the picture.

'This is only the tip of the iceberg,' said Doug. 'It's not even summer yet, and it will only get worse.'

People seldom think when they leave their bait bands or plastic bags on the groyne that they end up in the sea and cause havoc among the wildlife.

Doug has made a particular study of the hazards of plastic in the marine environment, and it's a subject he feels passionately about.

'It's wildlife officers who get to see the destructive and cruel results of people's carelessness,' he explained. 'We are confronted time and time again with wildlife in heart-rending predicaments. We are the ones who spend days, sometimes fruitlessly, trying to catch and free entangled birds and sealions. I was called out one night to rescue a Southern Giant Petrel and spent some time swimming in the cold Indian Ocean.'

We stopped and talked to some men who were angling from the jetty. As it turned out one of them had recently seen a bird entangled in fishing line, and so had some awareness of the problem. Soon it could be a common sight, but it doesn't need to be.

'If only people realised the serious consequences for our unique marine wildlife,' said Doug. 'I'm sure they would make the effort to take their rubbish home and dispose of it properly.'

Turtles are also endangered because many species feed on jellyfish. To a turtle's senses floating plastic bags are indistinguishable from food. Alaskan Parakeet Auklets have been discovered with stomachs full of plastic beads remarkably similar in shape and colour to their normal diet of small crustaceans. Ironically, starvation is the major cause of death for birds or mammals that ingest plastic. It is indigestible and can fool the animal into believing its stomach is full of food, as well as preventing proper digestion or elimination of any food that is eaten.

Synthetic, single-strand, fishing nets are almost universal. They are cheap and very effective, because they are impossible to see underwater. Problems arise when old nets or bits of nets lost or discarded at sea drift on endlessly 'fishing' for no gain, and extraordinarily high loss. Each year 50 000 northern fur seals drown after being entangled in ghost nets in the Northern Pacific.

Go for a stroll on any remote islands from the Aleutians to the Abrolhos and you will find plastic litter on the beaches. Tourist beaches in Spain are raked of plastic before and during the tourist season. Where is all this junk coming from? Both the fishing and shipping industries have played a large part in the problem, sometimes inadvertently, other times through sheer irresponsibility. Plastic is either lost from ships or deliberately dumped. Figures reported in *Australian Fisheries*, July 1986 include the fact that:

each day the world's shipping fleet discarded an estimated 450 000 plastic containers into the sea, and each year fishing vessels dumped more than 24 million kilograms of plastic packaging material and 135 million kilograms of plastic fishing gear... more than 1000 miles of fish netting is lost or discarded at sea annually.

Additional sources of marine plastic pollution are the plastics factories which line many coasts, and have, until recently, discharged waste into what they must have considered the boundless ocean. Plastic dumped on land can find its way into river systems and thence

to the sea. The ocean belongs to no one nation; perhaps that is why up until now we have all been careless. Now we are paying the price. The ocean is beginning to give our rubbish back.

Although the no-man's-land nature of the high seas may have contributed to widespread marine pollution, now the problem is so severe it is international efforts that are providing solutions. In the matter of dumping in the world's waters we are very much our brother's keepers. The United Nations Environmental Programme

Condemned without trial, a Cormorant is strung up with fishing line (right).

This giant cuttle was caught in a fishing net, so the fisherman cut off its tentacles and threw it back in the ocean (bottom).



P. D. Shaugh/Inesky



John Butler

has worked to gain a series of agreements among nations that border important bodies of water. This is almost worldwide with the exception of an agreement covering nations that border on the Indian Ocean. A regional treaty covering this area is being worked out. One of the main tenets of such agreements include extreme limitations on ocean dumping.

Probably the most comprehensive countermeasures to marine pollution are contained in the London Dumping Convention. Any State in the world can become a signatory to this Convention. From Afghanistan to Zaire, from the United States of America to the Union of Soviet Socialist Republics, 55 nations have voluntarily subjected themselves to the London Dumping Convention.

"Each year 50 000 northern fur seals drown after being entangled in ghost nets in the Northern Pacific".

By doing so they have agreed to totally ban the dumping of certain wastes, and restrict the dumping of others. They will take an active role in policing the restrictions in local waters, and setting up authorities to monitor waste disposal and pollution levels. In addition, they also undertake the development of procedures to assess damages and legal liabilities in the case of transgressors.

In Australia, at the moment, it is illegal to dump rubbish within the Three Mile Nautical Limit. When Australia becomes signatory to the London Dumping Convention, however, this could be extended to the 200 Mile Nautical Limit. The Keep Australia Beautiful Campaign has legal powers to control littering both on land and at sea, and the Environmental Protection Authority controls industrial waste levels.

Above all, public education is vital. All the policing in the world will do no good until individuals and industry realise the impact of plastics on the marine environment. It may once have seemed fairly harmless to toss bait bands or lunch bags overboard. One look at a sealion slowly dying must surely convince you otherwise.

Fruitless death: dolphins inadvertently caught by off-shore gillnet fisheries (below).



Courtesy A. N.W.P.S. Canberra

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Cover Photo

We've heard of wolves baying at the moon, but frogs? Obviously, this amphibian is not above displaying a little lunacy. Nor is the photographer, Jiri Lochman, who must have been moonstruck to get this superb shot.

EDITORIAL

Every year at this time the subject of bush fires becomes a preoccupation with land managers. Steps must be taken to ready fire-fighters and their equipment; hazards must be identified and minimised; education programs for neighbours and visitors must be renewed. Fires are inevitable. The combination of hot, dry weather, inflammable fuels in the bush and ignition from lightning or careless people will see to it that almost every day over the next few months Conservation and Land Management Staff or Bush Fire Brigades will be fighting a bush fire somewhere in the State. Because of modern technology and efficient fire control practices, land managers these days can very largely determine the fire regime which is to be applied in a given area. For example, in most of the land CALM is responsible for, the policy is to try to keep fire out, pending a better understanding of ecological requirements. In a small proportion of the CALM estate (notably parts of the south-west forests), regular, controlled burning is done. The aim of this operation is to minimise the risk of serious wildfires in places where values are highest. The most important value to be considered in the South-West is human life. In this edition of *Landscape* readers are urged to recognise their individual responsibilities. Most importantly, these are to make their own houses safe from bush fires and to learn how to look after themselves and their families if a fire occurs. This dual approach by land managers and householders will help combat the worst consequences of one of nature's most dangerous and predictably-occurring events: the Australian summer bushfire.

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