

# Key threatening processes

## HARMFUL MARINE DEBRIS

'Injury and fatality to vertebrate marine life caused by ingestion of, or entanglement in, harmful marine debris' has been listed as a key threatening process under the Australian Government's *Environment Protection and Biodiversity Conservation Act 1999*.

### What is harmful marine debris?

Harmful marine debris consists of plastic garbage washed or blown from land into the sea, fishing gear abandoned by recreational and commercial fishers, and solid non-biodegradable floating materials (such as plastics) disposed of by ships at sea.

Marine debris resulting from the legal disposal of garbage at sea is excluded from this key threatening process. Under the *International Convention for the Prevention of Pollution from Ships*, overboard disposal of food, paper, glass, metal and crockery (but **not** plastics) is permitted from vessels more than 12 nautical miles from land.

Plastic materials are defined as: bags, bottles, strapping bands, sheeting, synthetic ropes, synthetic fishing nets, floats, fibreglass, piping, insulation, paints and adhesives. Disposal of plastics at sea is totally prohibited by the *International Convention*.

### How does marine debris affect threatened species?

Marine debris is a hazard for all sea creatures, and an added danger to the survival of species already listed as threatened or endangered under the *Environment Protection and Biodiversity Conservation Act 1999*.

#### Entanglement

Entanglement in marine debris can cause restricted mobility, starvation, infection, amputation, drowning and smothering.

Turtles, whales and sea birds may be severely injured and even die after entanglement with fishing lines, fragments of trawl netting or plastic packing straps. Seabirds caught up in marine debris may lose their ability to move quickly through the water, reducing their ability to catch prey and avoid predators; or they may suffer constricted circulation, leading to asphyxiation and death. Fishing line debris, nets and ropes cut into the skin of whales or turtles, leading to infection or the slow and painful amputation of flippers, tails or flukes.

#### Ingestion

Marine species confuse plastic bags, rubber, balloons and confectionery wrappers with prey and ingest them. The debris usually causes a physical blockage in the digestive system, leading to painful internal injuries. Turtles frequently eat plastic bags, confusing them with jellyfish, their common prey. Sea birds eat polystyrene balls and plastic buoys, confusing them with fish eggs and crustaceans, and the Humpback, Southern Right and Blue Whales eat plastic debris. Autopsies performed on marine species such as Grey Nurse Sharks have found that swallowed hooks have punctured the stomach, pericardial cavity and oesophagus causing infection and death.



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### Which species are particularly affected by ingesting or entanglement in marine debris?

The following endangered and vulnerable species listed under the *Environment Protection and Biodiversity Conservation Act 1999* are adversely affected by the threatening process:

**Endangered Species:** Loggerhead Turtle, Southern Right Whale, Blue Whale, Tristan Albatross, Northern Royal Albatross, Gould's Petrel

**Vulnerable Species:** Leatherback Turtle, Hawksbill Turtle, Flatback Turtle, Green Turtle, Wandering Albatross, Humpback Whale, Antipodean Albatross, Gibson's Albatross, Southern Royal Albatross, Indian Yellow-nosed Albatross, Grey Nurse Shark, Grey-headed Albatross, Blue Petrel, Northern Giant Petrel

### What are the implications of the listing of this key threatening process?

The listing will now lead to the development of a Threat Abatement Plan for the process.

The plan will build on existing activities to mitigate marine debris, such as government programs to improve waste retrieval from watercourses; anti-littering laws; laws controlling overboard disposal of ship and boat garbage and fishing gear; and plans to reduce the litter from plastic shopping bags.

The Threat Abatement Plan will:

- Review existing policies, codes of practice, conventions and activities to determine their effectiveness.
- Coordinate abatement strategies identified in separate marine animal Recovery Plans such as the Marine Turtle Recovery Plan and the Grey Nurse Recovery Plan.
- Examine the effectiveness of joint agreements with other nations (and the need for new ones) to address the issues of marine debris and its impact on wildlife.

### What does the listing mean for marine industries?

Marine industries and other users of the marine environment will be invited to participate in the development of the Threat Abatement Plan, including the review of existing laws and codes of practice.

The declaration of this key threatening process will not require new laws or additional regulatory measures for shipping, boating, or the fishing industry. Rather, there may be more effective enforcement of existing laws for the disposal of waste at sea and a wider implementation of existing codes of conduct.

A threat abatement team will examine any new measures that may be required, such as technological alternatives to make debris less harmful to wildlife, public education programs or new arrangements with our northern neighbours.

### Where can I get further information?

Further information on the *Environment Protection and Biodiversity Conservation Act* is available at [www.ea.gov.au/epbc](http://www.ea.gov.au/epbc) or by contacting the Community Information Unit at the Department of the Environment and Heritage on **1800 803 772**.

#### Photography credits

Front (top to bottom): Turtle (Lance Ferris, Australian Seabird Rescue)

• Plastic bag in waterway (Department of the Environment & Heritage) • Turtle caught by float (Lance Ferris, Australian Seabird Rescue) • Grey-headed Albatross (Australian Antarctic Division) • Turtle (Dhimurru Land Management Aboriginal Corporation).

Reverse (top to bottom): Turtle (Dhimurru Land Management Aboriginal Corporation) • Gould's Petrel fledgling (Nicholas Cariile) • Blue whale (Corel) • Turtle (Lance Ferris, Australian Seabird Rescue).