MARINE DEBRIS - WHAT ARE THE IMPACTS?

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Marine debris can injure or kill marine and coastal wildlife, damage and degrade habitats, interfere with navigational safety, cause economic loss to fishing and maritime industries, degrade the quality of life in coastal communities and threaten human health and safety. It may also play a role in climate climate change.

Credit: NOAA https://marinedebris.noaa.gov/multimedia/photos/impacts#prettyPhoto

WILDLIFE IMPACTS

ENTANGLEMENT: Discarded nets, rope, fishing line, balloon strings and other marine debris items pose an entanglement threat to birds, dolphins, seals, turtles and other wildlife. Entanglement can impact animals in many ways: restricting mobility; ability to breath or feed; infection and amputation and potentially death.

INGESTION: Many marine species have been found to ingest marine debris, both due to mistaken identity for food as well as incidental ingestion while feeding. Ingesting plastic may lead to lack of nutrition, intestinal blockage, internal injuries, starvation and even death.

ECONOMIC LOSS

Marine debris can cause significant economic losses, particularly in industries that rely on the ocean such as tourism, fishing and shipping.

Marine debris can deter tourists from visiting beaches and other coastal areas. Cleaning up marine debris can place a financial burden on local governments and communities. Damage to fishing gear and vessels by marine debris can result in lost fishing time and productivity. Marine debris can also contaminate seafood leading to lost revenue for the fishing industry.

ECOSYSTEM IMPACTS

Derelict fishing gear and other heavy debris can cause physical damage to the seafloor, breaking corals and smothering surfaces. Floating debris can act as a raft for invasive species and pathogens, allowing them to travel long distances across the ocean, posing a risk to local ecosystems and biodiversity. On coastlines it can impact the nesting behaviour of certain species such as sea turtles.

HUMAN SAFTEY

Marine debris can pose a significant navigation hazard for ships, boats and other vessels. A collision with a large piece of underwater debris can sink small boats, and discarded nets and lines can get in propellers and cause damage to engines. Hazardous materials such as chemicals, batteries, medical waste, broken glass and other sharp objects can wash up on our shores, causing injury to beachgoers.

FAST FACTS

90% of Flesh-footed Shearwater chicks on Lord Howe Island have plastic in their stomachs[1]

Marine debris ingestion occurs in over 1400 species[2] 81 out of 123 marine mammal species,[3] half of all seabird species[4] and all seven sea turtle species are known to have ingested plastic[5]

CO_2

Plastic pollution may disrupt the ocean's capacity to absorb and sequester carbon dioxide, leading to accelerated climate change

FAST FACTS REFERENCES

1. https://www.sciencedirect.com/science/article/abs/pii/S0269749121016687
2. https://www.sciencedirect.com/science/article/abs/pii/S0025326X19300189
3. https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/conl.12781
4. https://sharkresearch.earth.miami.edu/
5. https://onlinelibrary.wiley.com/doi/full/10.1111/gcb.14519

Burst balloons can be mistaken for jellyfish by marine life

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