

## Plastic pollution choking Australian waters and killing wildlife: CSIRO study

<http://www.abc.net.au/news/2014-09-15/plastic-pollution-choking-australian-waters-study/5744398>

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**Photo:** Litter impacts wildlife through entanglement and ingestion, with 43 per cent of seabirds from study discovered with plastic in their gut.

Three-quarters of the trash found off Australian beaches is plastic, a new study says, warning that the rubbish is entangling and being swallowed by wildlife.

Researchers surveyed the vast Australian coastline at intervals of about 100 kilometres, compiling the world's largest collection of marine debris data, the Commonwealth Scientific and Industrial Research Organisation (CSIRO) said.

"We found about three-quarters of the rubbish along the coast is plastic," CSIRO scientist Denise Hardesty said.

"Most is from Australian sources, not the high seas, with debris concentrated near cities."

The report, part of a three-year marine debris research and education program developed by Earthwatch Australia with CSIRO and energy group Shell, found there were two main drivers of the pollution - littering and illegal dumping.

Rubbish found included glass and plastic bottles, cans, bags, balloons, pieces of rubber, metal and fibreglass, as well as fishing gear and other items lost or discarded in or near the sea.

The report said this marine debris not only posed a navigation hazard but could smother coral reefs, transport invasive species, harm tourism and kill and injure wildlife.

It warned that litter impacted wildlife through entanglement and ingestion, but also indirectly via the chemicals it introduced into marine ecosystems.

Smaller turtle species in particular ingested the debris, possibly because soft, clear plastic resembled its natural prey jellyfish.

"Our findings indicate oceanic leatherback turtles and green turtles are at the greatest risk of both lethal and sub-lethal effects from ingested marine debris," the report said.

Birds, meanwhile, ate everything from balloons to string, with the survey finding 43 per cent of seabirds had plastic in their gut, with the Tasman Sea between Australia, New Zealand and the Southern Ocean pinpointed as a high risk region.

"Our analyses predict that plastics ingestion in seabirds may reach 95 per cent of all species by 2050, given the steady increase of plastics production," the report said.

Entanglement also posed the risk of death or maiming to seabirds, turtles, whales, dolphins, dugongs, fish, crabs and crocodiles and other species.

"Approximately one-third of marine turtles around the world have likely ingested debris, and this has increased since plastic production began in the 1950s," Ms Hardesty said.

"We also estimate that between 5,000 and 15,000 turtles have been killed in the Gulf of Carpentaria after becoming ensnared by derelict fishing nets mostly originating from overseas."