

14 million tonnes of microplastics on sea floor: Australian study

October 7 2020



A volunteer of the NGO 'Canarias Libre de Plasticos' (Canary Islands free of plastics) carries out a collection of microplastics and mesoplastic debris to clean the Almaciga Beach, on the north coast of the Canary Island of Tenerife, on July 14, 2018.

The world's sea floor is littered with an estimated 14 million tonnes of

microplastics, broken down from the masses of rubbish entering the oceans every year, according to Australia's national science agency.

The quantity of the tiny pollutants was 25 times greater than previous localised studies had shown, the agency said, calling it the first global estimate of sea-floor microplastics.

Researchers at the agency, known as CSIRO, used a robotic submarine to collect samples from sites up to 3,000 metres (9,850 feet) deep, off the South Australian coast.

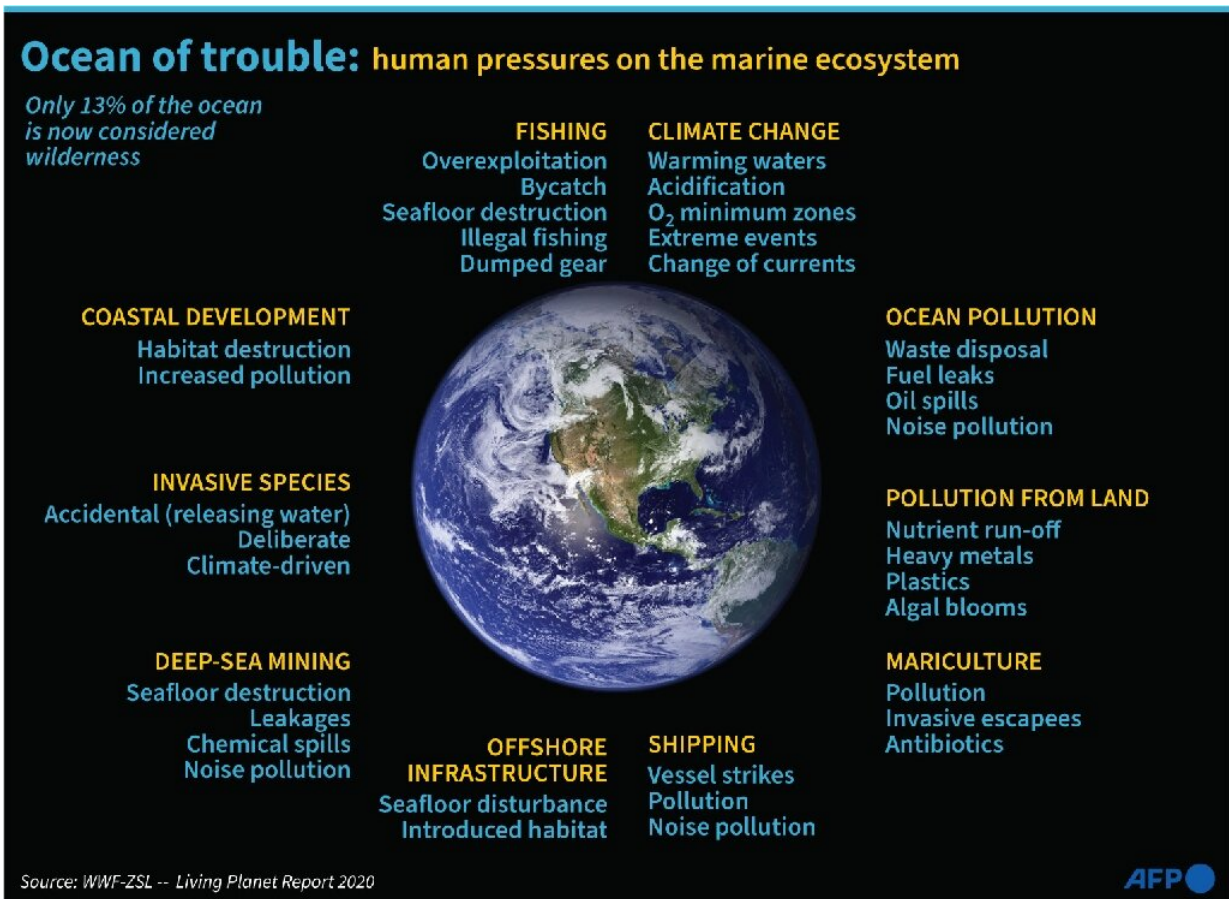
"Our research found that the [deep ocean](#) is a sink for microplastics," principal research scientist Denise Hardesty said.

"We were surprised to observe high microplastic loads in such a remote location."

The scientists, who published their findings in peer-reviewed journal *Frontiers in Marine Science*, said areas with more floating rubbish generally had more microplastic fragments on the [sea floor](#).

"Plastic pollution that ends up in the ocean deteriorates and breaks down, ending up as microplastics," study lead Justine Barrett said.

"The results show microplastics are indeed sinking to the ocean floor."



Graphic outlining the environmental degradation of the oceans caused by human activity.

Hardesty called for urgent action to find solutions to marine [plastic pollution](#), which affects ecosystems, wildlife and human health.

"Government, industry and the community need to work together to significantly reduce the amount of litter we see along our beaches and in our oceans," she said.

More information: Justine Barrett et al. Microplastic Pollution in Deep-Sea Sediments From the Great Australian Bight, *Frontiers in*

Marine Science (2020). [DOI: 10.3389/fmars.2020.576170](https://doi.org/10.3389/fmars.2020.576170)

© 2020 AFP

Citation: 14 million tonnes of microplastics on sea floor: Australian study (2020, October 7) retrieved 21 June 2024 from <https://phys.org/news/2020-10-million-tonnes-microplastics-sea-floor.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.