

'250 billion' plastic fragments in Mediterranean

December 30 2010



People sunbathe beside the Mediterranean on Tel Aviv beach on Monday. Some 250 billion microscopic pieces of plastic are floating in the Mediterranean, creating a biological hazard that reverberates up the food chain, according to research supported by green campaigners.

Some 250 billion microscopic pieces of plastic are floating in the Mediterranean, creating a biological hazard that reverberates up the food chain, according to research supported by green campaigners.

The estimate comes from French and Belgian [marine biologists](#) who analysed water samples taken in July off France, northern Italy and Spain to a depth of 10-15 centimetres (four to six inches).

"The rough estimate is that there are roughly 250 billion pieces of micro-debris in all the Mediterranean," said Francois Galgani, of the French

Institute for Exploration of the Sea (Ifremer), said.

The figure derives from 4,371 minute pieces of plastic -- average weight 1.8 milligrams (0.00006 of an ounce) -- found in the samples, "which extrapolates to roughly 500 tonnes for the entire Mediterranean," Galgani said.

Ninety percent of the samples, taken by volunteers from Expedition MED (Mediterranean in Danger) on a 17-metre (55-feet) yacht, had such fragments.

The sampling only covered surface waters and is a preliminary evaluation. Further samples, off Gibraltar, Morocco, Algeria, Tunisia, Sardinia and southern Italy, will be taken in 2011 to get a wider picture.

Micro-sized [plastic](#) is an enduring hazard, as it becomes mixed with [plankton](#), which is then ingurgitated by small fish that are then eaten by larger predators, says Expedition MED.

It says there is an accumulating pile of evidence of the damage that this does to larger forms of marine life, including seals and tortoises.

"The only solution is to stop micro-debris at the sources," said Expedition MED's Bruno Dumontet.

The group is launching an on-line petition to demand tougher European Union (EU) rules on the disposal and biodegradability of consumer goods.

(c) 2010 AFP

Citation: '250 billion' plastic fragments in Mediterranean (2010, December 30) retrieved 2 May 2024 from <https://phys.org/news/2010-12-billion-plastic-fragments-mediterranean.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.