## The Guardian



## Microplastics in our mussels: the sea is feeding human garbage back to us

A new report found the seafood contains an alarming amount of plastic - and in fact no sea creature is immune. It's as if the ocean is wreaking its revenge

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hellfish are the natural filter systems of our seas, mechanisms of purity. So, to discover in a report released on World Oceans Day that mussels bought from UK supermarkets were infested with microplastic seems like a final irony in the terrible story of the plasticisation of the sea. According to the study by the University of Hull and Brunel University London, 70 particles of microplastic were found in every 100 grams of mussels.

There's a vital disconnection here - highlighted by the bottled water you drink to wash down your moules-frites, and the fact that 89% of ocean trash comes from single-use plastic. No sea is immune from this plague, nor any ocean creature, from the modest mussel or zooplankton to the great whales.

I have just returned from Cape Cod, where, due to pollution and other anthropogenic effects, the North Atlantic right whale may be extinct by 2040 - a huge mammal about to vanish from the sight of the shores of the richest, most powerful nation on Earth.

On the pristine, remote Cisco Beach on Nantucket, I watched a grey seal watching me - only to realise the sleek pelage of its midriff was bound with an orange plastic bag.

Last month, off St Ives in Cornwall, I saw a cormorant tugging helplessly at a monofilament of fishing line that had trussed its bill to its arched neck. The underwater photographer Andrew Sutton sends a selfie from Costa Rica: he is holding miles of illegal plastic long line, tangled like a grotesque bouquet. From Sri Lanka to the Mediterranean, our summer holiday idylls become places of mortality.

That we cannot look underneath what Herman Melville called "the ocean's skin" is part of the problem. It is as if, defeated by the sea's mystery, we punish it for defying our dominion. And so, it wreaks its revenge, feeding our own rubbish back to us. Shakespeare's Ariel looked down into the ocean and saw "something rich and strange"; we look down and see our consuming society reflected back at us.

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