



### 本集内容

Record levels of microplastics discovered on the ocean seabed 研究人员发现海底微塑料含量达有史以来最高值

### 学习要点

有关 “plastic pollution (塑料污染)” 的词汇

### 边看边答

How many plastic particles per square metre have been discovered in the world's oceans?

### 文字稿

A simulation of the deep ocean. This experiment, in a large tank in a lab in the Netherlands, shows how ocean currents push mounds of sediment across the seafloor. Mixed into those mounds are millions of tiny pieces of plastic, and scientists have now measured the extent of this seabed pollution.

这是一个深海模拟试验。这项在荷兰一个实验室内的大型水槽中进行的试验展示了洋流推动海底成堆沉积物流动的过程。沉积物中混杂着数百万的微型塑料碎片，科学家们现已测量了这片海底的污染程度。

Prof Elda Miramontes, University of Bremen

We are all aware of all of the plastic that is floating in the ocean, but it only represents one per cent of the whole amount. The rest is somewhere in the deep sea. We found in this area the highest **accumulations** ever reported in the global oceans and there are 1.9 million particles, pieces, small pieces per square metre.

埃尔达·米拉蒙特斯教授 不来梅大学

“我们都知道海面上漂浮着大量的塑料，但这只占了总量的百分之一。其余的都在深海。我们在这片区域内发现的塑料碎片**堆积物**是有记录以来全球海洋中浓度最高的，每平方米含有 190 万颗微粒和微型碎片。”

Studies in 2018 by some of the same researchers revealed just how much plastic pollution was locked in UK riverbeds then **flushed** out to sea during floods.

该实验的部分研究人员在 2018 年开展的研究揭示了有多少塑料污染物滞留在英国的河床中，然后在洪水期间**被冲入**大海。

These latest experiments, in the Mediterranean, extracted whole chunks of sea floor from depths of up to a kilometre. That enabled scientists to track how the currents carry plastic waste out to sea, where it **breaks down**. The deep currents then accumulate these millions of **fragments** into what researchers call microplastic hotspots.

这些最新的实验在地中海进行，科学家们从深达一公里的海底挖出了整块的海床。这使他们能够追踪洋流是怎样将塑料垃圾带到海洋中的，塑料垃圾在海洋中会**分解**成小碎片。这些深海洋流接着将数百万个**碎片**聚积到研究者们所称的“微塑料热点地区”。

The majority of the particles they found were tiny fibres from textiles and clothing that simply slip through the filtration systems in waste water treatment plants.

研究人员们发现的大多数颗粒物来自纺织品和服装的微小纤维，它们很容易从废水处理厂的过滤系统中流出来。

Dr Ian Kane, University of Manchester

We're filling in part of the gaps in our understanding of this missing 99 per cent of plastic. There are **fragile** ecosystems on the seafloor which depend on the nutrients and oxygen which are being flushed by these ocean currents. These currents are transporting microplastics to the same places that these fragile ecosystems exist.

伊恩·凯恩博士 曼彻斯特大学

“我们在一定程度上填补了对下落不明的 99%的塑料认识上的空白。海底有**脆弱**的生态系统，它们依赖于被洋流冲走的营养物质和氧气。洋流正在把微塑料输送到这些脆弱生态系统存在的地方。”

Scientists from the British Antarctic Survey, in another study published this week, revealed that plastic pollution was reaching the shores of some of the most remote islands.

英国南极调查局的科学家在本周发表的另一项研究中透露，塑料污染已经蔓延到一些最偏远的岛屿。

In recent years we have finally started to see the impact that our plastic waste has on the oceans. This research has started to uncover the invisible, long-term consequences.

近年来，我们终于开始看到塑料垃圾对海洋环境的影响。这项研究已开始揭示那些肉眼看不见的、长期的后果。

## 词汇

accumulations 堆积物

flushed 被冲走

breaks down 分解

fragments 碎片，碎块

fragile 脆弱的，易受影响的

## 视频链接

<https://bbc.in/2WJVmtp>

## 问题答案

Scientists have found 1.9 million plastic particles per square metre.