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## 本集内容

Acidic oceans will reduce sea life, says study 研究说酸化海洋会导致海洋生物减少

## 学习要点

有关“biology 生物学”的词汇

## 边看边答

Which sea creature could have its population reduced by a quarter if levels of CO<sub>2</sub> are left to rise in the sea?

## 文字稿

Here is the effect of carbon dioxide on sea water. These bubbles contain natural CO<sub>2</sub> from an underwater volcano in Papua New Guinea. Few sea **creatures** can live here because the CO<sub>2</sub> has made nearby water more acidic. Swim away from those vents, and what a difference.

The sea's chemistry returns to normal. And wonderful reef life can **thrive**. But industrial society is churning out CO<sub>2</sub> on a massive scale. And the gas is being absorbed into seawater round the world, making it all more acidic.

### Dr Simon Boxall, Oceanographer

This comprehensive study confirms what we have been observing globally. Ocean suffocation is a problem. Acidity is increasing, and that's not just having an impact on the **ecology** which we're seeing already. But it will have an impact on us as humans further down the line.

Take one fish we love to eat, cod. The research shows that baby cod are especially sensitive to more acidic water. It projects that if CO<sub>2</sub> levels rise unchecked, we should expect only a quarter as many cod in the seas. Some **species** will thrive with the changes, the scientists say, like some seaweeds. But the report warns that all sea life will be affected by the disruption of the **food web** in the seas.

这就是二氧化碳对海水产生的影响。这些气泡中含有巴布亚新几内亚的一座海底火山所产生的天然二氧化碳。几乎没有海洋生物能在这里得以生存，这是因为二氧化碳使附近的水域酸化。如果你游离这些排出二氧化碳的气孔，就会发现海水环境大有不同。

海水的化学性质会变回正常值。礁类生物能够繁盛生长。但工业社会正在大规模且快速地产出二氧化碳，而废气则被世界各地的海水所吸收，导致海洋酸化愈发严重。

### 西蒙·伯克斯尔博士 海洋学家

这项综合性研究证实了已在全球范围内被观察到的现象。因海水脱氧而造成的“海洋窒息”是一个急需解决的问题。我们已经看到，日益升高的海水酸度影响到了生态环境。但除此之外，在未来，它还会波及人类自身。

就拿我们爱吃的鳕鱼来打个比方吧。该研究显示，鳕鱼幼崽对酸性更高的水体格外敏感。据推测，如果持续升高的二氧化碳水平得不到遏制，未来鳕鱼的数量将减至目前的四分之一。科学家们说，有些海洋物种并不会受到这一变化的影响，仍会茂盛地生长，比如海藻。但该报告提醒人们，一旦海洋食物网遭到破坏，所有海洋生物都会受到影响。

### 词汇

#### creatures

生物

#### thrive

茁壮、茂盛地生长

#### ecology

生态系统，生态环境

#### species

物种

#### food web

食物网

视频链接: <http://bbc.in/2AHbyQg>

### 你知道吗?

Around 70% of the Earth's surface is covered by oceans. Despite this, it is estimated that 95% of the world's oceans and 99% of the ocean floor are unexplored. This is due to the difficulty, time and cost needed to do so.

地球表面约 70% 的部分都被海洋覆盖。尽管如此，据估计，世界海洋的 95% 及海底的 99% 仍未经勘察。这是由于考察的难度大、耗时长和所需成本高。

### 问题答案

According to this research, if CO2 levels rise unchecked, we should expect only a quarter as many cod in the seas.