



本集内容

Changing Antarctica 南极海洋生物与环境变化

学习要点

有关“survival（生存）”的词汇

边看边答

What is the temperature of the ocean around Antarctica?

文字稿

Antarctica is the most extreme continent on Earth. Few animals can survive the bitter cold. But one Antarctic environment is surprisingly stable - the ocean. But it is cold - minus two degrees centigrade.

南极是地球上环境最恶劣的大陆。几乎没有动物能承受那里的严寒。但有一个南极环境却惊人地稳定——海洋。不过海水很冷，零下二摄氏度。

Like everywhere else in the world, the Antarctic environment is changing. In some places the water is already warming - a huge **challenge** for animals that have never experienced any change.

和世界上其它地区一样，南极的环境也在变化。在一些地方，水已开始变暖，这对一些动物来说是个巨大的**考验**，这些动物从未经历过任何变化。

Justin Rowlatt, BBC correspondent

So some of the incredible Antarctic animals are in this tank. Now Anne Todgham is a marine biologist; you've been studying these animals for years...

贾斯汀·罗拉特 BBC 通讯员

“这个水箱里有一些奇妙的南极动物。安妮·托吉姆是一位海洋生物学家。你多年来一直在研究这些动物……”

Dr Anne Todgham, Associate Professor, University of California Davis
So they have anti-freeze proteins inside of them that keep them from freezing. They have different red blood cells that are in fact not red. They have **compensated** for the cold, so they can go about their daily lives and actually **thrive** in an environment that most animals will find very stressful.

安妮·托吉姆博士 副教授 加利福尼亚大学戴维斯分校

“这些动物的体内有抗冻蛋白质，可以防止它们被冻住。它们有与众不同的红细胞，这些红细胞实际上并不是红色的。它们的身体为了抗冻而进行了自我**弥补**，从而能够在这种环境中正常地生活，并**茁壮成长**，尽管这种环境让大多数动物难以生存。”

The big question for Anne is how well these extraordinary creatures will be able to **adapt**. The results so far are not promising.

对安妮来说，最大的问题是：这些非凡的生物**适应**环境的能力有多强。到目前为止，结果并不乐观。

Dr Anne Todgham, Associate Professor, University of California Davis

I am actually pretty worried, I wish the data was wrong, I wish I didn't have to be worried. But you know there are a lot of things that are going to change in the ocean, and these animals are being stressed **to their max**.

安妮·托奇姆博士 副教授 加利福尼亚大学戴维斯分校

“我其实很担心，我希望数据是错误的，我多希望我不必担心。但海洋中有很多东西将会发生变化，而这些动物承受的压力已经**到了极限**。”

You may wonder why we should worry about the fate of a few unusual species, but the scientists here say we should think of what's happening as a warning. If these animals can't survive in our changing world, what does that say about our future?

也许你想知道为什么我们要为一些不寻常物种的命运而担忧，但这里的科学家们说，我们应把正在发生的事情视为一个警告。如果这些动物无法在我们不断变化的世界中生存，那这对我们的未来意味着什么？

词汇

challenge (对动物生存的) 考验

compensated 补偿了

thrive 茁壮成长

adapt 适应

to their max 达到极限

视频链接

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

问题答案

It's a cold, minus two degrees centigrade.