

Taller plants moving into warmer Arctic 长得较高的植物向更温暖的北极地区移动

有研究称，低矮灌木、草地以及其它生长在北极地区的植物正变得越来越高。这一结果来自一位分析过三十年植物测量资料的科学家。该数据是从阿拉斯加、加拿大、冰岛、斯堪的纳维亚和俄罗斯等地采集到的，它表明是气候变暖推动了这一变化。

You have to be pretty **hardy** to **flourish** in the Arctic, and those plants that do tend to live just a few centimetres above the ground. But the cold north in recent decades, has seen some of the fastest rates of warming on the planet and the **flora** have reacted accordingly.

能在北极茁壮生长的植物得相当耐寒，而这类植物距离地面的高度往往只有几厘米而已。但近数十年来，寒冷的北极地区的升温速度极快，已跻身于地球各地前列，而这里的植物群也相应地受到了影响。

It's not just that existing shrubs and grasses have increased their **stature**, although that is the case, but rather that taller species are now moving into areas they never used to grow in large numbers. This shift has **repercussions**, an international team reports in the journal Nature. Taller Arctic plants trap more snow around them, **insulating** the ground from cold air. And that'll speed up the **thawing** of permanently frozen soils, releasing their carbon into the atmosphere. It's a feedback that should further warm the climate.

问题不仅仅在于现有灌木和草地的高度有所增长，虽然确实如此，而更在于原本就较高的植物种类正大规模地向其从未生长过的地域移动。据一支国际团队在期刊《自然》上发表的报告称，该变化造成了负面的影响。较高的北极植物会在其周围存住更

多的雪，使地表与冷空气隔绝。这样一来就加快了永久冻土的解冻过程，并向大气层释放碳。这是一种会使气候进一步变暖的反应。

Isla Myers-Smith from the University of Edinburgh says that on **current trends**, the centimetres-tall Arctic plants could double in size by the end of the century. What sets this study apart is its scale – more than 60,000 plant measurements all across **northern latitudes**. And that's just the modern data – the research also lent on decades of previous **observations**.

来自英国爱丁堡大学的艾拉·迈尔·史密斯说，照目前的趋势来看，数厘米高的北极植物数量有可能在本世纪末前翻一番。该研究的独特之处在于其规模之大，它囊括了六万多个来自北纬各地区的测量结果。而这还只是现代数据，该研究还借鉴了过去数十年间的观察资料。

1. 词汇表

hardy	耐寒的
flourish	茂盛生长
flora	植物群
stature	高度
repercussions	负面的影响
insulating	使隔热，使隔离
thawing	解冻
current trends	当前的趋势

northern latitudes	北纬地区
observations	观察结果、观察资料

2. 阅读理解：请在读完上文后，回答下列问题。（答案见下页）

1. What has caused plants in the Arctic to grow taller?

2. True or false? *Plants that are new to the area are growing taller than existing shrubs and grasses.*

3. What is causing the permanently frozen soil to thaw?

4. Why is this particular study so special?

3. 答案

1. What has caused plants in the Arctic to grow taller?

This area of the world has seen some of the fastest rates of warming on the planet and the flora have reacted accordingly.

2. True or false? *Plants that are new to the area are growing taller than existing shrubs and grasses.*

False. Taller species are moving into areas that never used to grow in large numbers. But also, existing shrubs and grasses have also increased their stature.

3. What is causing the permanently frozen soil to thaw?

Snow trapped around the Arctic plants is insulating the ground from cold air, which is helping to thaw the permanently frozen soils.

4. Why is this particular study so special?

What sets this study apart – or makes it so special - is its scale. More than 60,000 plant measurements all across northern latitudes.