**Study: Non-Native Species to Rise Sharply by 2050**

**研究：到2050年外来物种将急剧增加**

Researchers are predicting that the number of non-native species will rise by about 36 percent worldwide by 2050.

研究人员预测，到2050年全球非本土物种的数量将增加36%。

Non-native, or alien species, are plants or animals that humans have moved around the world to places where they are not naturally found. Sometimes the introduction of an alien species to an area is accidental. Sometimes, it is done on purpose.

非本土物种或者叫外来物种是指人类在全球各地将并非原生于当地的植物或动物迁徙到该地。有时外来物种进入某个地区是偶然事件，有时则是有意为之。

Research shows the movement of plants and animals rose across the planet over the last century as human trade and travel opened up new worldwide pathways.

研究表明随着人类贸易和旅行开辟出新的全球航线，上世纪全球动植物的迁徙也有所增加。

A new study predicts such movements are likely to continue, with the largest increases expected to be big insects, birds and small creatures such as mollusks and crustaceans.

一项新的研究预测这种迁徙活动可能会继续下去，预计增长最大的将是大型昆虫、鸟类以及像软体动物和甲壳类动物这样的小型生物。

Researchers are calling for more rules and better observation methods to help reduce the spread of alien species.

研究人员呼吁制定更多的规则和更好的观察方法来帮助减少外来物种的传播。

The findings were recently reported in the publication Global Change Biology.

这一发现最近发表于《全球变化生物学》期刊。

Scientists involved in the study say more than 35,000 alien species had been identified in the most recent report on the subject in 2005. Some of the species can go on to become invasive, meaning they spread quickly in undesirable and harmful ways.

参与这项研究的科学家们表示，2005年关于这一课题的最新报告中已确认超过3.5万种外来物种迁移。有些物种会随着迁徙演变成入侵，这意味着它们会以不受欢迎和有害的方式迅速传播。

The study suggests alien species introductions will increase on every world continent. But the largest increases are predicted to be in Europe. The researchers estimate such species will increase 64 percent across Europe by around 2050.

这项研究表明，世界各大洲外来物种的引进都将会增加，而预计增幅最大的将是欧洲。研究人员估计，到2050年左右外来物种将在整个欧洲增加64%。

Hanno Seebens is an ecologist at Germany’s Senckenberg Biodiversity and Climate Research Centre. He was the lead writer of the study. “Together with climate change and land use change, invasive alien species are posing one of the greatest threats to biodiversity,” Seebens said.

汉诺·西本斯是德国森肯伯格生物多样性和气候研究中心的一名生态学家。他是这项研究的主要作者。“侵略性的外来物种、气候变化和土地利用变化正在引起对生物多样性的最大威胁，”西本斯说。

He added that a species can only arrive in a new area when human activity connects different areas. “When we extended our trade networks, we connected more and more (areas), which allowed more and more species to come.”

他补充道，一个物种只有在人类活动连接不同区域时才能到达一个新领域。“当我们扩展贸易网络时，我们连接的地区越来越多，这使得越来越多的物种迁移得以实现。”

The researchers developed a mathematical model to predict alien species introductions for each continent between 2005 and 2050. The model was based on past records of alien species introductions, as well as estimates of species that could end up becoming invasive if current movements continue.

研究人员开发了一个数学模型来预测2005年至2050年间每个大陆外来物种的引进情况。这个模型是基于外来物种引进的历史记录以及当前的迁徙活动继续下去，那么最终可能演变为入侵物种的外来物种的预估。

Cascade Sorte is a professor of ecology and evolutionary biology at the University of California Irvine. She was not part of the research. “We know that a certain proportion of alien species will be problematic, so the more of them that there are, the higher the likelihood that we'll have problems,” she said.

凯斯凯特·索特是加州大学欧文分校的生态学和进化生物学教授。她并未参与此项研究。她表示：“我们知道一定比例的外来物种会产生问题，所以数量越多出现问题的可能性就越高。”

Sorte described the latest predictions as “shocking” because even with the past rises in alien species, “there's even a possibility that things can get worse.”

索特将最新的预测形容为“令人震惊”，因为即使按照过去外来物种数量的增加来看，“情况也有可能变得更糟” 。

However, Hanno Seebens said it is possible the number of species could fall in the future based on continued rising movements. “We may just run out of species to be transported, because at some point, all species may have been transported already,” he said.

然而汉诺·西本斯也表示基于持续上升的迁徙，未来物种数量可能会下降。他说：“我们可能已经没有可供迁徙的物种了，某种程度上看所有物种都可能已经被迁徙了。”

I’m Bryan Lynn.

布莱恩·林恩报道。

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