水母能帮我们解决问题吗？ Can jellyfish help us solve our problems?

Hello. This is 6 Minute English from BBC Learning English. I'm Neil.

大家好。这里是 BBC 学习英语栏目的六分钟英语。我是内尔。

And I'm Georgina.

我是乔治娜。

Of all the weird and wonderful creatures living under the sea, perhaps the strangest are jellyfish-those rubbery, cone-shaped creatures found floating in the water, their long tentacles trailing behind.

千奇百怪的海洋生物中，也许最奇怪的就是水母了——这些像橡胶一样的锥形生物漂浮在水中，身后拖着长长的触角。

Some jellyfish species have a bad reputation for scaring away tourists, clogging up fishing nets, and even blocking power station pipes.

有一些水母种群的名声很糟糕，因为它们会吓跑游客，堵住渔网，甚至还会堵塞发电站的管道。

But with more and more plastic rubbish ending up in the sea, these days you're as likely to swim into a plastic bag as a jellyfish.

但是随着海洋中的垃圾越来越多，如今你在游泳的时候遇到塑料袋的概率跟水母遇到塑料袋的概率一样。

Now scientific research is discovering that these rubbery sea creatures might provide an answer-a sticky solution to the problem of plastic pollution.

科学研究正在探究这些像橡胶一样的海洋生物可能会提供一个答案——塑料污染问题的黏黏的解决方案。

In this programme, we'll be learning how jellyfish mucus could provide the answer to plastic waste in the seas.

在本期节目中，我们将学习水母的黏液如何为海洋中的塑料垃圾提供解决方案。

And of course we'll be learning some related vocabulary along the way.

当然在此过程中，我们还会学习一些相关词汇。

But first it's time for my quiz question.

但是现在是我的问题时间。

Georgina, you mentioned jellyfish scaring away beach goers with their sting, but what is the best way to treat jellyfish stings?

乔治娜，你刚刚提到了水母用它们的刺吓跑了海边的游客，但是治疗水母蜇伤的最佳方式是什么呢?

Is it a) with ice, b) with salt, or, c) with vinegar?

是 A. 用冰，B.用盐，还是 C. 用醋?

添加的词汇

commonly

英:/'kɒmənlɪ/ 美:/'kɑmənli/

adv. 一般地；通常地；普通地

Well, Neil, I have been stung by a jellyfish before and I think the best way to treat them is c) with vinegar.

嗯，内尔，我之前被水母蜇伤过，所以我认为治疗它们的最佳方法是C.用醋。

OK, Georgina, we'll find out later if that's right.

好的，乔治娜，我们稍后会揭晓答案。

Now, as I mentioned, in recent years tiny pieces of plastic called microplastic have been a significant problem for the world's seas and oceans.

就像我之前提到的那样，最近几年来，称作微塑料的小型塑料一直是世界海洋的一大问题。

They've been found all over the world-in Arctic ice, at the bottom of the sea and even inside animals, including humans.

全世界都能发现它们的踪迹——北极冰川，海底，甚至在动物体内，包括人类。

Slovenian scientist, Dr Ana Rotter, heads Go Jelly, a European research team of jellyfish ecologists looking into the problem.

斯洛文尼亚科学家安娜·罗特是 Go Jelly 的领导，这是欧洲的一个由研究这个问题的水母生物学家组成的研究队。

Here she is speaking to BBC World Service programme, People Fixing the World.

以下是她对话 BBC 世界服务节目《People Fixing the World》。

Microplastics, plastics in general, are being an increasing problem-they're everywhere.

微塑料，大体上是塑料，正在成为一个越来越严峻的问题——它们无处不在。

When I was a little girl, we were more environmentally friendly, not knowing...so we never used plastic bags to go shopping, we always went with cloth bags, we never used plastic to put our vegetable in it, single-use spoons, or forks, knives...this is for me something unheard-of when I was a little girl.

我小时候人们更环保，不知道……所以我们从不带塑料袋去购物，我们总是拿着布袋，我们从不用塑料装蔬菜，一次性汤勺或叉子，刀……这些东西在我小时候闻所未闻。

Dr Rotter says when she was a child, people were more environmentally friendly-not harmful to the environment or having the least possible impact on it.

罗特博士说她小时候人们更环保——对环境无害或者尽量少影响环境。

At that time, there were very few single-use plastics-plastic items, like spoons and forks, designed to be used just once, then thrown away.

那个时候，几乎没有一次性塑料——塑料制品，例如勺子和叉子，被设计只使用一次，然后就扔掉。

Single-use plastic bags, for example, were unheard-of-surprising or shocking because they were not previously known about or ***commonly*** used.

例如，一次性塑料袋就是闻所未闻的——令人惊讶或令人震惊，因为它们之前从来不为人所知或经常被使用。

The situation since then has changed dramatically.

那之后的情况发生了剧烈变化。

In fact, there's been such an increase in microplastics that today the UN lists plastic pollution as one of the world's top environmental threats.

事实上，微塑料增长的如此之快以至于现在联合国把塑料污染列为了世界头号环境威胁。

But how do jellyfish fit into the story?

但是水母是怎么参与到这个故事中来的呢?

Well, it's the 'jelly' part of jellyfish, and specifically their sticky, jelly-like mucus that is key.

嗯，就是水母中的“凝胶”，尤其是它粘粘的，像果冻一样的黏液才是关键。

Here's Dr Rotter again, explaining more to BBC World Service programme, People Fixing the World.

以下还是罗特博士的讲话，进一步跟 BBC 世界服务节目《People Fixing the World》进行解释。

The mucus-this is a like a viscous substance that is being excreted from a jellyfish, might have they are called absorptive properties...so it means that the particles-various particles can attach to this mucus...so, could we use jellyfish and their mucus as a magnet for the microplastic particles?

黏液——这是水母排出的一种粘稠的物质，可能具有所谓的吸收性.....所以这意味着那些微粒——各种附着在这个黏液上的微粒.....所以我们可以利用水母和它们的黏液作为吸引那些微塑料例子的磁铁吗?

Jellyfish produce a thick, sticky liquid called mucus.

水母会产生一种叫做黏液的厚厚的粘稠液体。

Dr Rotter has discovered that this mucus has strong absorptive properties-it can absorb, take in liquids and other substances and hold them in.

罗特博士发现这种黏液有很强的吸收性——它可以吸收液体和其它物质并将它们包含在内。

One of the substances jellyfish mucus absorbs are the particles that make up microplastics.

水母黏液吸收的物质之一就是那些构成微塑料的微粒。

By trapping these tiny pieces of floating plastic, the mucus acts like a magnet-an object that attracts certain materials, like metal, or in this case, microplastic waste.

通过捕捉这些漂浮的微小碎片，黏液就像一块磁铁——能够吸引某种材料，如金属的物体，或者在这里，指的是微塑料废物。

As rising sea temperatures and overfishing of their natural predators have boosted jellyfish numbers, this novel way of using their mucus couldn't have come at a better time.

随着海洋温度的升高，以及天敌被过度捕捞，水母的数量大大增加，这种利用它们黏液的新奇方式来的正是时候。

Dr Rotter's research is still in the early stages, but it's hoped that jellyfish mucus could hold the key to a future free of microplastic polluted oceans.

罗特博士的研究仍然处于初期阶段，但是水母黏液很有希望成为未来解决被微塑料污染的海洋的问题的关键。

Which is a big prize for the cost of few jellyfish stings.

这也是被水母蜇所带来的一大好处。

Speaking of which, Neil, what was the correct answer to your quiz question?

说到这个，内尔，今天问题的答案是什么？

Right, I asked you the best way to treat jellyfish stings.

是的，我之前问你治疗水母蜇伤的最佳方式。

What did you say, Georgina?

你说的是什么，乔治娜？

I said it's c) with vinegar.

我说的是 C. 醋。

Which is the right answer!

回答正确！

Well done.

干得漂亮。

Vinegar inactivates the sting's venom, so remember to pack a bottle of vinegar the next time you head to the beach!

醋会使蛰咬中的毒液失活，所以下次去海边的时候记得带一瓶醋！

In this programme, we've been hearing how scientists are using jellyfish mucus-a thick, sticky liquid produced in their bodies, to break down microplastics in the sea.

在本期节目中，我们一直在听科学家们如何使用水母粘液——他们体内产生的一种厚厚的黏黏的液体，来分解海洋中的塑料。

Our addiction to single-use plastics-plastic items which are used only once, then thrown away, and which often get washed out to sea, has created a situation which is definitely not environmentally friendly-that means having a minimal impact on the environment.

我们对于一次性塑料——只使用一次就被扔掉，然后被冲到海里的塑料制品——的沉迷造成了一种一点都不环保——它的意思是对环境产生最小的影响——的情况。

Until quite recently, the problems of micropollution and single-use plastic were unheard-of-surprising or shocking because of not having been previously known about.

直到最近，微塑料和一次性塑料的问题一直都是闻所未闻的——由于之前没有了解而令人吃惊或震惊。

Scientists are hoping that the mucus's absorptive qualities-its ability to absorb liquids and other substances and hold them, will allow it to trap particles of plastic floating in the sea, making jellyfish mucus a magnet for pollution-an object that attracts certain materials-usually metals but in this case, microplastic waste.

科学家们希望粘液的吸收性——它吸收液体和其他物质并把它们留住的能力，能让它捕捉漂浮在海洋里的塑料微粒，让水母粘液成为了一个吸附污染的磁铁——吸引某种物质的物体——通常是金属，但是在这里指的是为塑料垃圾。

That's all for this programme, but to hear more about how these amazing sea creatures could help clean our oceans, why not check out People Fixing the World from the BBC World Service?

这就是本期节目的所有内容，但是要了解更多关于这些神奇的海洋生物如何帮助我们的海洋，请查看 BBC 世界服务节目 《People Fixing the World》。

And to hear more interesting items on trending topics, why not join us again soon here at 6 Minute English?

要想获得更多有趣的关于流行话题的内容，请再次收听六分钟英语。

Bye for now!

再见！

Bye!

再见！