参考译文

Bioluminescence Helps Prey Avoid Hungry Seals

生物发光帮助猎物避开饥饿的海豹

Deep in the inky depths of what’s called the ocean’s mesopelagic zone, more than five hundred meters below the surface, the main source of light is not the sun. Even during the day. Most of the light comes instead from bioluminescent organisms, creatures that produce their own light. It's in these dark depths that southern elephant seals love to feast on squids and fish.

在海洋中海洋带漆黑的深处，海平面以下500多米的地方，光的主要来源并不是太阳。即使是在白天。大部分的光也来自于发光的生物，这种生物可以自己发光。就是在这些黑暗的深处，南方象海豹喜欢吃鱿鱼和鱼。

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“一开始我们想知道海象是如何在黑暗中寻找猎物的。”

Pauline Goulet from the University of St. Andrews Sea Mammal Research Unit.

圣安德鲁斯大学海洋哺乳动物研究中心的圣保罗·古利特说。

Thanks to data logging technology, researchers have a fairly good handle on how far elephant seals travel to feed, and how long and how deep they dive. But nobody really knew how they find their prey in the darkness. Do they track the lights, or is something else going on?

多亏了数据记录技术，研究人员能够很好地掌握海象觅食的路线，以及它们潜水的时间和深度。但没有人真正知道它们是如何在黑暗中找到猎物的。它们是在跟踪灯光，还是有其他的原因?

"So we built a sensor that could pick up flashes produced by animals that were being hunted by the elephant seal…because we thought that elephant seals might be looking for that light to catch a snack."

“所以我们制造了一个传感器，可以捕捉到海象捕猎动物发出的闪光……因为我们认为海象可能是在寻找这种光源来获取食物。”

But it turned out that the fish actually used their bioluminescence to disorient seals after the seals began their attack.

但事实证明，在海象开始攻击它们之后，这种鱼实际上是用生物发光来迷惑海豹。

"The thing is it seemed that the flashing prey were harder to catch than the non-flashing prey. Which we found out by looking at the duration of the chase, which was longer for flashing prey."

“闪光的猎物似乎比不闪光的猎物更难捕捉。我们通过持续观察发现，追捕闪光的猎物需要更长的时间。”

The fish flash was always emitted just after the seal launched an attack, making it a defensive, reactive maneuver to distract the seals. But at least one seal learned to turn that liability into a hunting strategy.

海豹发动攻击后，鱼儿开始闪光，这是一种防御性的反应动作，目的是分散海豹的注意力。但至少有一只海豹学会了将责任转化为捕猎策略。

"This seal appeared to be a master in catching the flashing prey, because each time it tried to catch a prey, first it would do this little head movement that was probably mechanically sensed by the prey. Then it would induce the prey to flash because the prey reacts to this approaching predator."

“这只海豹似乎擅长捕捉闪光猎物，因为每次它试图捕捉猎物时，首先它会做小的头部运动，这个动作能被猎物机械地感觉到。然后会诱导猎物闪光，因为猎物会对接近的捕食者做出反应。”

This seal would twitch her head, see where the light came from, and only then start the chase.

这只海豹会晃动头部，看光从哪里来，然后开始追逐。

So even if some seals can use bioluminescence as a way to find food, for most the light is a distraction. Goulet thinks that seals probably rely more on their whiskers to sense the movements their prey make in the water.

因此，即使有些海豹可以利用生物发光来寻找食物，但对大多数海豹来说，光是一种干扰。古利特认为海豹可能更多地依靠的自己胡须来感知猎物在水中的动作。

"It's just a step forward into understanding what's happening in these depths, in this ecosystem that we don’t really know much about, especially in the Southern Ocean."

“这只是进一步了解海底深度发生了什么，尤其是在这个我们真的不太了解的生态系统中，特别是在南大洋。”

听力原文

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