

本集內容

Following whales round the Southern Ocean 跟蹤南冰洋附近遷徙的鯨魚

學習要點

有關 “researching animals (研究動物)” 的詞彙

邊看邊答

Where is the whales' main wintering ground?

文字稿

In New Zealand, southern right whales were hunted to near extinction about a century ago. Since that time, the population has slowly recovered.

在紐西蘭，南露脊鯨在大約一個世紀前被捕殺至瀕臨滅絕。但自那時起，其數量就緩慢回升。

Dr Emma Carroll, University of Auckland

My name is Dr Emma Carroll. I'm the lead scientist on a research project called 'Tohora no Aotearoa', which is a Maori phrase that means 'southern right whales of New Zealand'. We estimated there are around 2000 whales in 2009.

艾瑪·卡羅爾博士 紐西蘭奧克蘭大學

“我是艾瑪·卡羅爾博士。我是一個名為 ‘Tohora no Aotearoa’ 的研究項目的首席科學家，這是一個毛利語短語，意思是 ‘紐西蘭南露脊鯨’。我們在 2009 年估計約有 2000 頭鯨魚。

However, nobody's really gone back to look at them over the last decade.

然而，在過去十年間，沒有人真正回去查看它們。

And so, this year and last year, we **conducted** surveys at their main wintering ground down in the Auckland Islands, which is about 450 kilometres south of the main islands of New Zealand.

所以，今年和去年，我們在這些鯨魚的主要越冬地開展了調查，即紐西蘭主島以南 450 公里的奧克蘭群島。”

[TEXT ON SCREEN: Permission is needed to visit the area, and the weather is harsh. Emma's team have been tracking where the whales feed and whether climate change is affecting their behaviour. 訪問這個地區需要許可，而且天氣惡劣。艾瑪的團隊一直在追蹤這些鯨魚的覓食地，並關注氣候變化是否在影響其行為。]

Dr Emma Carroll, University of Auckland

So, what we did is we used satellite **tags** to **track** their **migrations** out of that Auckland Islands wintering ground and follow them around the Southern Ocean.

艾瑪·卡羅爾博士 紐西蘭奧克蘭大學

“我們使用了衛星**追蹤裝置**來**跟蹤**它們從奧克蘭群島的越冬地**遷移**出來的過程，並跟蹤它們到了南冰洋周圍。”

The whales are still **transmitting**, we're still collecting a lot of data, but already what we've found has been quite surprising. Historically, we knew that southern right whales from New Zealand would travel north and east of New Zealand during those spring and summer months. However, none of our tracked whales show those migration patterns, and instead, most of them actually go west.

這些鯨魚身上的裝置仍在**傳送信號**，我們也仍在收集大量資料，但目前的發現相當驚人。我們知道，紐西蘭的南露脊鯨向來會在春夏月份遷徙到紐西蘭的北部和東部。然而，沒有任何一頭被我們追蹤的鯨魚顯示出了這種遷移模式，相反，它們中的大多數其實是向西遷移的。”

[Surprisingly one whale, dubbed Bill, kept transmitting for a year. He went on the longest migration ever recorded for the species. 令人驚訝的是，一頭名叫比爾的鯨魚在一年內持續傳送信號。它進行了有記錄以來該物種距離最長的遷徙。]

Dr Emma Carroll, University of Auckland

So, these results are actually pretty important and give us hope for this population because Bill or Wiremu the whale is actually feeding in areas south of Australia, as well as along the Antarctic coast. And so what that says is, you know, maybe one of those regions won't be so good and won't have as much prey one year, but maybe the other will, and so there is resilience there. And so that gives us hope that even with changing oceans, these whales have more than one strategy that they can use to find lots of food.

艾瑪·卡羅爾博士 紐西蘭奧克蘭大學

“所以，這些結果其實非常重要，讓我們對該鯨魚物種生出希望，因為鯨魚比爾或威勒姆其實是在澳大利亞南部和南極海岸一帶覓食的。這就意味著，也許其中的一個地區一年內情況不佳，沒有什麼獵物，但也許其它地點有，所以這體現了鯨魚的適應力。因此，這給了我們希望：即使海洋不斷變化，這些鯨魚也有不只一種策略來尋找大量食物。”

I'm really proud of the fact that we are using all of these modern tools to get a really complete picture of not just their recovery but how they're using the oceans. And we're able to bring those two aspects together to get a really good picture of where this population is at and how it might go in the future.

這件事讓我引以為傲：我們正在使用這些現代工具來獲得鯨魚的真正全貌，不僅瞭解它們數量上的回升，還包括它們利用海洋的方式。我們能夠把兩方面結合起來，從而對該物種數量的現狀和未來的發展有很好的認識。”

詞彙

conducted 開展了

tags 追蹤定位裝置

track 跟蹤

migrations 遷移

transmitting 傳播信號

視頻連結

<https://bbc.in/3GCTfNQ>

問題答案

Their main wintering ground is in the Auckland Islands ---- about 450 kilometres south of the main islands of New Zealand.