

本集內容

How tourism and science work together in Antarctica 南極洲旅遊業與科學共榮

學習要點

有關 “adventure (冒險)” 的詞彙

邊看邊答

How many visitors go to Antarctica each year?

文字稿

'Trip of a lifetime' is how many describe going to Antarctica. This incredibly **alluring** but **remote** location attracts around 60,000 visitors each year.

許多人將前往南極洲稱為“終生難得的旅行”。這個極具魅力而偏遠的地方每年吸引約六萬名遊客。

These tourists are travelling on the Roald Amundsen, an **expedition** cruise ship that uses battery hybrid powered engines, has an impressive science centre, and equipment below deck that automatically analyses the surrounding seawater.

這些遊客乘坐的是羅爾德·阿蒙森號，這是一艘考察遊輪，使用柴油電池混合動力發動機，配有一個令人歎為觀止的科學中心，甲板下方的設備可以自動分析周圍的海水。

This scientist, visiting the ship for the first time, wonders if it's capable of doing even more.

這名科學家第一次造訪這艘船，他想知道這艘船是否還有更多用處。

Alexander Koloskov, Senior Scientist, Vernadsky Research Base

This ship may be effectively used for real science, not only for education, not only to spread the information between the tourists, but the tourists can help with the science.

亞歷山大·科洛斯科夫 沃納德斯基研究站（Vernadsky Research Base）資深科學家

“這艘船可以有效地運用於真正的科學研究，而不僅是用於教育或向遊客傳遞科普知識，當然遊客也可以助科研一臂之力。”

Professor Alia Khan has a five-year research grant from the US National Science Foundation to study snow algae, and how it affects the rate that snow melts. But she can't spend five years straight in Antarctica, so joining a trip like this works well for her.

阿利雅·卡恩教授獲得了美國國家科學基金會一項為期五年的科研基金，用於研究雪藻及其對雪融化速率的影響。但她無法整整五年一直待在南極洲，所以參加這種行程再合適不過了。

Alia Khan, Assistant Professor, Western Washington University

I'm able to collect some samples and data for my research, and I can use some of the facilities on the ship, such as the microscopes, to look at the samples and then also work with the tourists to show them what I'm sampling in the snow.

阿利雅·卡恩 美國西華盛頓大學助理教授

“我可以為我的研究收集樣本和資料，並使用船上的顯微鏡等設備來查看樣本，然後向遊客展示我在雪地上採集的樣本。”

Most of the ship's expedition crew also have science backgrounds, and help run citizen science projects for the passengers.

這艘船上的大部分探險隊員也有科學背景，他們面向旅客開展公民科學專案活動。

Zoe Walker, Science Coordinator, Hurtigruten Expeditions

You have a little bubble of water on top and no air...

佐伊·沃克 Hurtigruten 探險公司科學協調員

“它的表面有水泡，但沒有空氣……”

Studying the microscopic phytoplankton in the water helps monitor the effects of global warming. Samples are packed up and sent off to be analysed by researchers who can't get here themselves.

研究水中微小的浮游植物可幫助監測全球變暖的影響。樣本會被裝好並寄給無法親自到場的研究人員進行分析。

Zoe Walker, Science Coordinator, Hurtigruten Expeditions

Coming to places like Antarctica costs a lot and takes a lot of planning, so by integrating citizens into their science, they're able to collect data repeatedly at the same locations throughout the season while the tourist ships are already here.

佐伊·沃克           Hurtigruten 探險公司科學協調員

“到南極洲這樣的地方成本很高，而且還要制定詳盡的計畫，所以通過將遊客行程和科學考察結合在一起，科學家們得以在遊船待在南極的整個期間在相同地點反復收集資料。”

Julie Ritson, BBC correspondent

Scientists also live and work in Antarctica for many months of the year. This presents its own unique challenges, logistics being one of them.

朱莉·瑞特森           BBC 通訊員

“科學家們一年中會在南極生活和工作好幾個月。許多難題也隨之而來，物流就是難題之一。”

This research base on Livingston Island is temporary home to around 40 scientists, but their supply ship has been delayed and they're running low on food. Luckily, our ship was nearby and able to help.

這個位於利文斯頓島的研究站是大約 40 名科學家的臨時住所，給他們運送補給的船隻受到延誤，他們的食物就要用盡。幸好我們的船就在附近，能夠給他們提供幫助。

For them it's been a lifesaver that tourist ships cruise these waters.

對他們來說，行駛在這片水域的遊船可給他們幫了個大忙。

But what the scientific community really hope, is that the passengers return home as **ambassadors**, who can educate others and help change behaviours that threaten this **fragile** environment.

但科學界真正希望的是，乘客們以宣傳大使的身份回家，向其他人普及相關知識，並幫助改變威脅南極這個脆弱環境的行為。

## 詞彙

alluring 有魅力的，吸引人的

remote 偏遠的

expedition 探險，考察

ambassadors 大使，宣傳者

fragile 脆弱的

視頻連結

<https://bbc.in/3xOkL9I>

問題答案

Antarctica gets around 60,000 visitors each year.