

Antarctica and the Endurance—Shackleton’s Trans-Antarctica Attempt

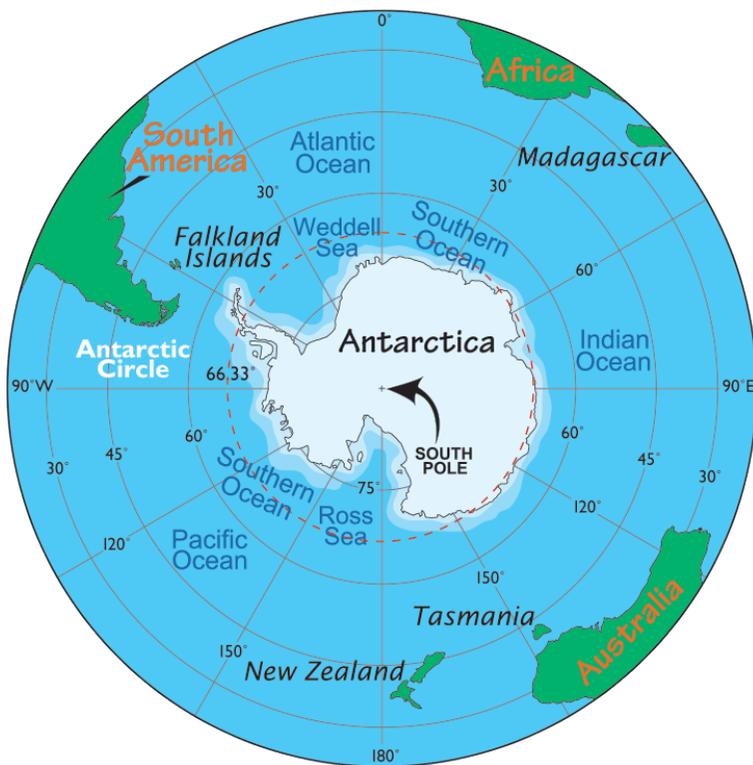
As part of the unit developing your mapskills, you explored how mapskills were important to Shackleton’s journey to Antarctica. Here is a short summary of the key additional points you have covered related to Antarctica and Shackleton’s expedition.

Shackleton - The Trans-Antarctic Expedition and Endurance

Shackleton was born in February 1874 in Ireland, and in 1908 led an expedition to the Antarctica from which he was knighted on his return.

Shackleton made an attempt to cross the Antarctic continent setting off in 1914 in the ship “Endurance”, with a crew of 27 men.

Antarctica - The Route

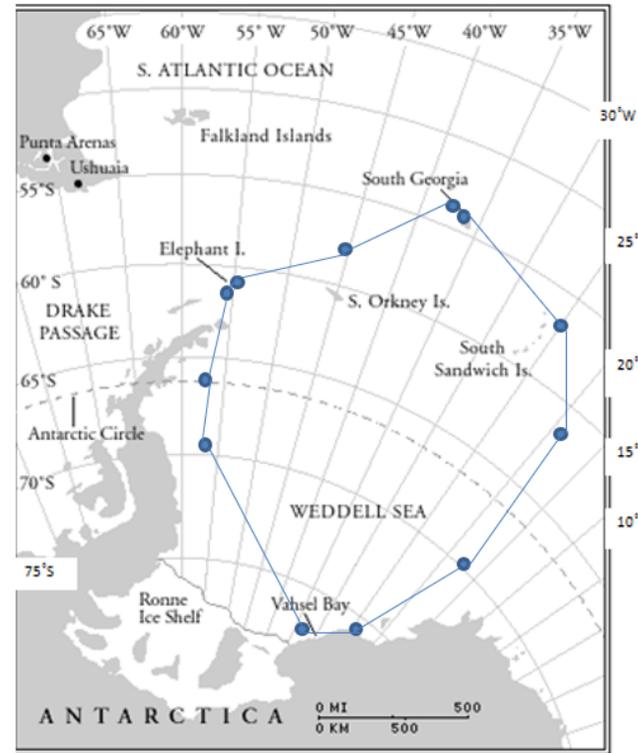


Source: <https://www.worldatlas.com/webimage/countrys/an.htm>

Geography and mapskills were essential to Shackleton’s expedition in order to ensure navigation of the ship to tackle to the route to Antarctica.

On the 6th August 1914 the Endurance left from Plymouth to Buenos Aires and then on 26th October they set sail to the island of South Georgia.

Latitude and Longitude was essential to pinpoint the location not only of the journey itself but also to identify where they were at any one time.



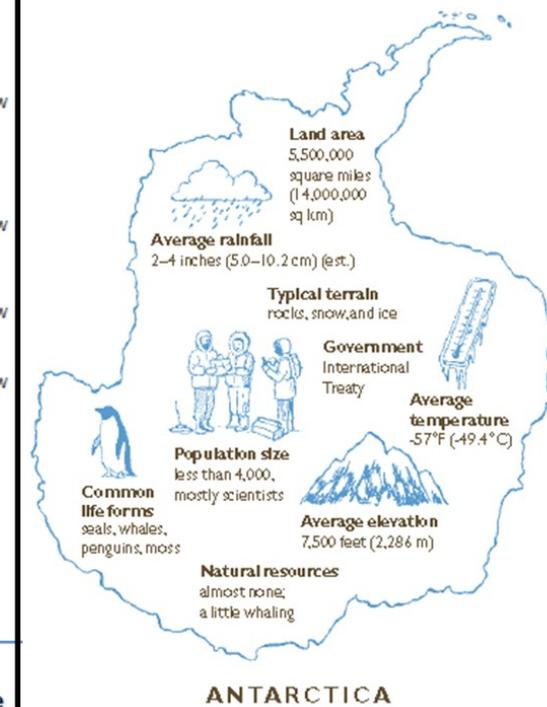
Shackleton's Actual Route

Position	Latitude	Longitude
Crew departs whaling station	54°S	36°W
Ship enters pack ice	57°S	25°W
Ship still in heavy pack ice	62°S	18°W
Ship stuck in ice	70°S	16°W
Ship stuck in ice	77°S	30°W
Ship crushed by ice	78°S	42°W
Ship crushed by ice	69°S	53°W
Crew drifts on ice floes	66°S	53°W
Small boats launched	62°S	54°W
Boat journey to Elephant Island	61°S	55°W
Boat journey to South Georgia	57°S	45°W
Crew reaches whaling station	54°S	37°W

The Geography of Antarctica

Antarctica is remote, cold and hostile. It was the last continent to be explored.

Understanding the Geography, including the climate, the animals etc. was essential to help ensure survival.



The Geographical Challenges facing the expedition:

- 98% of Antarctica is ice-covered
- Extreme overnight temperatures (can drop to -40°C) - require specialist clothing etc.
- Had to go over the Transantarctic Mountains
- Challenges of Antarctic Sea Ice and becoming stuck in the Ice—like the Endurance did.

What happened?

- The Endurance became frozen fast in an ice floe in the Weddell Sea.
- Eventually had to transfer men, provisions and equipment to camp on the ice.
- The trek was far too difficult so Shackleton called the march off and decided to make camp on the ice (named 'Ocean Camp'). Here, the crew made regular journeys back to the ship to get what supplied they could. The ship however went under in November 2015.
- Shackleton worried about moral (as well as the direction of movement) so by early December – the plan was to move.
- This trek was also very difficult and although some progress was made, it was called off and 'Patience Camp' established. This was home for three months!
- Eventually the crew set off for the nearest land in lifeboats and landed on Elephant Island.
- Shackleton then took 5 companions by boat to South Georgia whaling stations to get help to rescue the



Source: <https://www.express.co.uk/life-style/life/944557/Antarctic-explorer-Sir-Ernest-Shackleton-lost-ship-endurance>



Geography and the Expedition

• NAVIGATION SKILLS

Essential that were able to use compass bearings and latitude and longitude firstly to make crossing from Plymouth to Buenos Aires and then to South Georgia Island

No map of ice-flow so Shackleton has to make use of navigation skills to track direction going.

Also had to use navigation skills to find way from Elephant Island to South Georgia in order to get help for the rescue.

• UNDERSTANDING OF THE CLIMATE

In order to ensure the right clothes, supplies etc. were packed it was essential that the crew had understanding of the climate and how suddenly things could change as well as an idea of the temperatures that would be experienced whilst there.

Understanding that the pack ice would either thaw and break up and disperse, freeing the ship OR that it would be driven by the wind and crush the ship.

• THE ANTARCTICA ECOSYSTEM AND SURVIVAL

Penguins and Seals provided fresh meat to help with survival

Burnt seal blubber in order to keep warm in the extreme conditions.



Lifeboats arriving on Elephant Island (source: coolantarctica.com)

APPLYING YOUR KNOWLEDGE...

1. Name the main places and seas visited by Shackleton during the Endurance expedition
2. Explain how understanding geography helped Shackleton's expedition to Antarctica in the Endurance.

Now Challenge yourself even further!

1. What are the main challenges that Antarctica faces today? See if you kind find out how the following are putting pressure on Antarctica..

- (i) Climate Change
- (ii) Mineral Resources
- (iii) Overfishing
- (iv) Tourism

2. Find out what is meant by the **Antarctic Treaty** and why it is currently under threat.

Some ideas for finding out more...

This fantastic website "DISCOVERING ANTARCTICA" has lots of information about this fascinating continent, including information on its oceans, ice, ecosystems, tourism, challenges and the science and exploration taking place. Well worth exploring to find out more.

<https://discoveringantarctica.org.uk/>

OTHER RESOURCES

KS3 Schoology

BBC—Severn World One Planet—Antarctica <https://tinyurl.com/BBCAntarctica>

CoolAntarctica <https://www.coolantarctica.com/>

Antarctica Melting: Journey to the 'doomsday glacier' BBC News <https://www.youtube.com/watch?v=f0AWsJ0cmLE>



SCAN ME