

# ANTARCTICA

## Physical Features

### Glacial Ice Sheets



Antarctica is made up of the East and the West Antarctic Ice Sheets, the East being thicker, larger and the oldest of the two. The Transantarctic mountains separate these two areas.

### Islands and Ice Shelves



Some islands are permanently linked to the mainland by ice whereas others connect seasonally due to sea ice expansion and retreat. The Ross Ice Shelf (at the south) is the largest of these and covers an area larger than the UK.

### The Dry Valleys



Found in high altitude areas such as Victoria Land near the McMurdo research station. They can have enough melting in summer to allow some land to be free of glaciers.

*MORE* - There are many active and dormant volcanoes. Mount Erebus is one of these and there is one on Deception Island which is below the surface of the ice and creates subglacial eruptions. There is also the 'midnight sun' which is where the sun never sets in summer. However, in winter it can be permanent darkness too.

## Human Features

### Melting of the Ice



Global warming is melting the Antarctic Ice Sheet, causing sea levels to rise and is affecting wildlife which rely on the ice. Burning fossil fuels and farming has contributed to this.

### Race to the South Pole



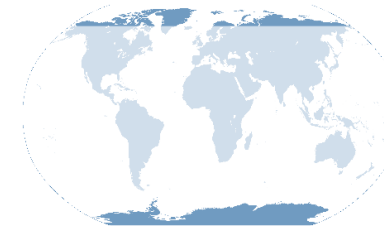
The first expedition to reach the South Pole was led by the Norwegian explorer Roald Amundsen. He and four others arrived at the pole on 14 December 1911, five weeks ahead of a British party led by Robert Falcon Scott as part of the Terra Nova Expedition.

### McMurdo Station



Antarctica has no town or cities with a living population. It does, however, have many research bases. McMurdo Station is on New-Zealand claimed Ross Dependency. Other countries who claim territories are Australia, U.K., Norway, Chile, France and Argentina.

## Arctic Circle



Antarctica

## FACT BOX

If Antarctica was a country, it would be the 5 largest by size. It is twice the size of Australia measuring 14.2 million km<sup>2</sup>

## Key Vocabulary

Antarctic Circle	one of earth's five circles of latitude
Antarctic Ocean	another name for the Southern Ocean
blizzard	a severe snowstorm with high winds
conservation	protection of natural environment and wildlife
frostbite	injury caused by exposure to extreme cold
glacier	a slow-moving mass or river of ice
Ice Age	when thick ice sheets called glaciers cover huge areas of land, which can last for millions of years and cause big changes to Earth's surface - have happened a number of times throughout Earth's history
iceberg	a large floating mass of ice broken from a glacier or ice sheet and carried out to sea.
ice floe	a sheet of floating ice
pack ice	a mass of ice floating in the sea
South Pole	South Magnetic Pole shifting within Antarctica
territory	area of land under someone's control
treaty	an Antarctic Treaty, signed in 1959, was to ensure that Antarctica continues to be used for peaceful purposes only

## CLIMATE

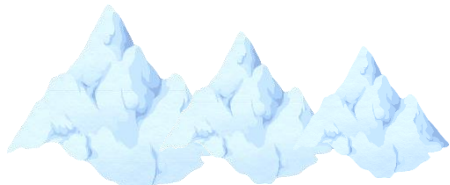
The Antarctic is the coldest, driest and windiest continent, even considered a desert due to its low rainfall. 98% of the continent is covered in ice and there are no permanent residents. Temperatures range from -30°C in summer to -60°C in winter.

## LONGEST RIVERS



- Onyx - 32km
- Jemmi Creek - 10.3km
- Aiken Creek - 6km

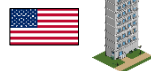
## TALLEST MOUNTAINS



- Mount Vinson 4892m
- Tyree 4852m
- Gardner 4685m

## POPULATIONS

McMurdo Station (U.S.A.)  
(1000 people)



Amundsen-Scott (U.S.A.)  
(200 people)



Frei Station (Chile)  
(170 people)

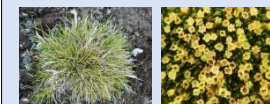


## FAUNA (ANIMALS)



Examples: emperor penguins, elephant seals, south polar skuas, killer whales (orcas), chinstrap penguins and crabeater seals.

## FLORA (PLANTS)



Examples: not much can grow in such harsh conditions, but Antarctic grass hair and pearlwort manage to survive.

