



# Polar Regions

## Fact Sheet for Adults



### General Facts

- The term 'polar regions' is used to describe areas in the northern Arctic and southern Antarctic areas of the world. The Arctic polar region is around the North Pole and the Antarctic polar region is around the South Pole.
- These regions are the coldest places on earth and very different from other habitats around the world. Polar regions are colder than other places around the world due to a number of different factors: they receive less direct heat and light from the sun; large amounts of snow and ice reflect the sunlight that does reach the earth; and there are fewer daylight hours, especially during their winter months.
- Although they are similar cold environments, the Arctic and Antarctic are also quite different. The Antarctic is colder than the Arctic, mainly due to the thick layer of ice at the South Pole, as opposed to the slightly warmer waters of the Arctic Ocean around the North Pole. Different forms of life also exist in the two regions.

### The Arctic

- **The Arctic:** The Arctic polar region consists of the Arctic Ocean and adjacent seas (such as the East Siberian Sea and the Kara Sea), parts of Alaska (USA), Canada, Finland, Greenland (Denmark), Iceland, Norway, Russia and Sweden. Throughout the year, the land masses are covered in varying amounts of snow and ice. Due to the cold temperatures, these lands are predominantly treeless and only some types of grass, moss, lichen and dwarf shrubs grow. Arctic seas often contain sea ice. Many animals and birds live in the Arctic, including polar bears, Arctic foxes, Arctic hares, reindeer, lemmings, snowy owls, beluga whales, narwhals, orcas, seals and walrus.
- **Polar bears:** Polar bears are large bears that live in the Arctic. Although they are born on land, they spend most of their time living on sea ice. They are often classed as marine mammals because they depend on the ocean to survive and spend much of their time in the ocean.
- **Arctic foxes:** Arctic foxes are also known as snow foxes, polar foxes or white foxes. They have thick fur which is brown in summer and white in winter. They have excellent hearing that enables them to hear their prey even under deep layers of snow.
- **Arctic hares:** Arctic hares have thick fur which changes from brown or grey in the summer to white in the winter, depending on where the animals live. Hares living in northern Canada, where summer months are quite short, remain white all year round. They sometimes dig holes in the snow for shelter and warmth.
- **Reindeer:** Reindeer are also known as caribou in North America. There are several different types of reindeer, which range in size from the smallest Peary caribou to the largest boreal woodland caribou. During winter months, reindeer often migrate to warmer climates. During summer months, they return to colder climates.
- **Lemmings:** Lemmings are small rodents with soft fur and short tails. They mainly eat leaves, roots and shrubs. They can dig and burrow through the snow and create stores of food for the winter months.
- **Snowy owls:** Snowy owls are large birds that live in the Arctic. They are covered in white feathers. Snowy owls get whiter as they get older. Females are often darker than male birds, with dark spots on their bodies or faces. They are also known as Arctic owls or great white owls.
- **Beluga Whales:** Beluga whales are marine mammals. They are also known as white whales due to their creamy white colour. They are one of the smallest species of whale. They have prominent rounded foreheads but do not have a dorsal fin on their back. Beluga whale calves are born a grey or brown colour and gradually fade to white at about the age of 5.
- **Narwhals:** Narwhals are a species of whale. Male narwhals are characterised as having a long tusk projecting from the front of their heads. Females sometimes grow a small tusk but they are not as long or prominent as male tusks.



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### The Arctic

- **Orcas:** Orcas are also known as killer whales and are the largest member of the dolphin family. They live in a variety of marine environments, including tropical seas and around both the Arctic and Antarctic polar regions. They have a distinctive black and white colouring and a large dorsal fin.
- **Seals:** There are many different types of seal, including fur seals, sea lions, walrus and grey seals. They can be found in many places around the world but prefer the colder waters of the polar regions. These marine mammals are called pinnipeds, from the Latin 'pinna' (meaning 'fin') and 'pedis' (meaning foot). They are semiaquatic, meaning they spend time both on land and in water.
- Many people live in the Arctic polar region, including groups of Inuit people living in places such as Greenland, Alaska (USA) and Canada. Some live in small communities and others prefer to travel around the region, building shelters from snow or ice, such as igloos, or tents covered with animal skins. Although no one permanently lives in the Antarctic, there are several scientific research bases which house people throughout the year and thousands of tourists visit the region each year.
- The Northern Lights are also known as the aurora borealis. These colourful lights in the sky are created by charged particles from the Sun being attracted to the magnetic North Pole and reacting with gases in the Earth's atmosphere. A similar display is also created at the South Pole, called aurora australis, but these are less accessible to see.

### The Antarctic

- **The Antarctic:** The Antarctic polar region consists of the area around the earth's South Pole. This includes the continent of Antarctica, the small islands, such as the South Orkneys and Scott Island, and also seas including the Ross Sea and Weddell Sea. Most of the continent is permanently covered by a layer of snow and ice. A few birds and animals live in the Antarctic, including penguins, seals, whales and albatross.
- **Penguins:** Penguins are flightless, aquatic birds that are native to the southern hemisphere. They have black and white plumage and flippers instead of wings. There are many different types of penguins, which range in size from the smallest species, little blue penguins (sometimes called fairy penguins) at around 40cm tall, to the largest species, emperor penguins, at around 1m tall. Some species of penguin live in the Antarctic, such as Adelie and emperor penguins.
- **Albatross:** Albatross are large seabirds. They are among the largest flying birds with wingspans of approximately 3.5 metres. They are able to glide and fly for long distances.



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## Fun Facts

- 'The midnight sun' is the name given to a natural phenomenon occurring in the polar regions where the sun can be seen even at midnight. The opposite of this phenomenon is called 'the polar night', when it is dark throughout the day. These events occur at each region once a year.
- Reindeer are the only deer where both males and females have antlers. These antlers fall off and grow anew each year.
- Lemming populations vary greatly in number from year to year, mainly due to the amount of food available and the weather conditions. It is believed that they do not hurl themselves off of clifftops but due to migration patterns some lemmings may drown when trying to cross large bodies of water in search of food or a new place to live.
- Polar bears have black skin that helps to keep them warm by soaking up the sun's rays. Their fur looks white but it is actually transparent! They have an excellent sense of smell and detect seals to eat that are nearly a mile away.
- Narwhals have the nickname 'unicorn of the sea' due to their long tusk looking like the horn of a unicorn.
- The Antarctic region covers approximately 20% of the southern hemisphere.
- Although all species of penguin are native to the southern hemisphere, they are not only found in cold climates such as Antarctica. Some species of penguin live in warmer climates and the Galapagos penguin lives near the equator on the Galapagos Islands.

Take a look at our Polar Regions Fact Cards within this [Polar Regions Discovery Sack](#) for some more fun facts!