

# Some Antarctic Basics...

## Antarctica...

This continent is the highest, driest, coldest, windiest, and emptiest place on earth. An ice sheet covers more than 99% of Antarctica. At its thickest point the ice sheet is 4,776 m (nearly 3 mi.) deep. This ice is approximately 90% of all the world's ice (by volume) and is 70% of all the world's fresh water. There are many penguins and abundant sea life along the coast – but there is little life on the continent, and there are no indigenous people.

## Temperatures...

The mean annual temperature at South Pole Station is minus 49°C (-56°F). Temperatures at McMurdo Station may reach as high as 8°C (46°F) in summer, while at South Pole Station, the record high summer temperature -12.3°C (9.9°F) was recorded in December 2011. Palmer Station's summer temperatures will reach above 4°C (40°F).

## Daylight and Darkness...

Simply put, much of the area above 66.5 degrees south enjoys one long day and one long night each year – with weeks of sunrise and sunset in between. There are spectacular displays of aurora australis (southern lights) during the winter darkness.

## Ownership...

No nation owns Antarctica. The Antarctic Treaty, which has been recognized by 50 countries, reserves the area south of 60 degrees South as a zone for the peaceful conduct of research. Treaty nations coordinate and cooperate to maximize research results and minimize logistics requirements.

## Size and Distance...

The continent is roughly 14 million sq. km. (5.4 million sq. mi.). The United States is smaller at 9.36 million sq. km. (3.6 million sq. mi.). The area of sea ice around Antarctica varies from 4 million sq. km. (1 million sq. mi.) in summer to 20 million sq. km. (7.7 million sq. mi.) in winter. The distance from Washington, D.C., to McMurdo Station is approximately 14,830 km. (9,920 mi.).

## Science...

Antarctica provides excellent conditions for scientific research on such topics as global climate change, ozone depletion, UV radiation, earth sciences, glaciology, astronomy, oceanic and atmospheric circulation, marine ecosystems, meteorite studies and biology, among others.

## History...

The existence of Antarctica was only a hypothesis until it was first sighted in 1820-21. No one set foot on the continent until 1895. The South Pole was first reached in 1911, and a year-round research station was established in 1956. Antarctica's history is packed full of extraordinary stories of heroism and survival.