



## **Antarctica Month**

### **Did you Knows**

1. Antarctica, together with Africa, Arabia, Australia-New Guinea, India, Madagascar, South America and New Zealand; once formed the southern super-continent known as Gondwana.
2. Ironically, because Africa and Antarctica used to be one continent, South Africa's current Antarctic base (SANAE IV) is perched on top of a gigantic outcrop of Karoo rock – nearly 5000 kilometres from home.
3. It takes 40 days to travel to Antarctica by ship and Antarctica can only be reached between November & December and between April & May.
4. Antarctica was first sighted in 1820 and the South Pole was first reached by a Norwegian explorer in 1911.
5. A South African meteorologist or weather expert, took the South African flag to the South Pole in 1958 as part of Sir Edmund Hillary's team to cross the continent overland – a journey that took 99 days.
6. JJ la Grange led the first South African Antarctic Expedition (SANAE 1), which left Cape Town in 1959 and reached Antarctica early in 1960, to take over the former Norwegian base.
7. South Africa is one of the 12 original signatories to the Antarctic Treaty System adopted in 1959 and a founder member of the Scientific Committee on Antarctic Research (SCAR).
8. The Antarctic Treaty was drafted to ensure that no dispute arises over the ownership of Antarctica.

9. The international Protocol on Environmental Protection has established Antarctica as a “natural reserve devoted to peace and science.” Hence, any military activities are prohibited and scientific investigation and cooperation encouraged.
10. Dr Aithne Rowse was the first woman to over-winter in Antarctica as a member of the fourth South African Antarctic Expedition (SANAE IV) team. This was the first team to over-winter in the SANEA IV base, from February 1997 to the following year.
11. For most South Africans, the winter solstice on 21 June passes unnoticed as the shortest period of daylight during the year. For the nine South Africans based in Antarctica this marks the mid-point of a three month period without any sun at all.
12. Every year in June the South African Antarctic Expedition (SANAE) and the other bases on Antarctica celebrate the winter solstice when the sun is the furthest from the equator. Scientists working on Antarctica then experiences three sunless months and celebrates the mid-point – June – with festivities and even variety concerts.
13. Scientists on Antarctica studies natural phenomena that happens in space, in the earth’s atmosphere and in the crust of the earth. Aurora Australis, or southern lights, is a ‘curtain’ of spectacular dancing lights in the sky. They are caused by the collision of the solar wind with the Earth’s atmosphere.
14. By studying the weather and the oceans from Antarctica, scientists are able to find clues to the process of global climate change.
15. Antarctica is the fifth largest continent on earth but has no permanent population.
16. Around 80 % of the world’s fresh water lies frozen in the ice sheet covering the continent. Were it to melt, global sea levels would rise by about 75 metres.
17. Antarctica is the continent with the highest average altitude above sea level: 2 500m.
18. Average winter temperatures are around -40°C, although the coldest temperature ever recorded was -89°C at Vostok Base.
19. Antarctica is technically speaking a desert, having very little precipitation, even in the form of snowfall. The continent also has the world’s lowest average humidity.

20. Static electricity on Antarctica poses a major hazard as far as sensitive electronic equipment used by scientists is concerned.
21. Appropriately enough considering its name, there are no polar bears in Antarctica (*arktos* being the Greek for bear)
22. There are no longer any sledge dogs on the continent. All dogs were withdrawn as an environmental safeguard in the early 1990s.
23. South Africa is also very active on the sub-Antarctic islands: Marion Island and Gough Island.
24. South Africa maintains a base on Marion Island in the Southern Ocean just over 2 000km south-east of Cape Town. Marion Island and Prince Edward Island, twin peaks of a volcano, form the Prince Edward Islands group.
25. During 1996, Gough Island and its surrounding waters were given World Heritage Site status.
26. In the past 40 years, Marion Island's average temperature has increased by almost two degrees Celsius. Sub-Antarctic temperatures are rising faster than anywhere else in the world.
27. Marion Island's rainfall has dropped some 600mm to 1900mm per year, following the idea that the Island is becoming warmer and drier. Gough Island has in the region of 3120mm rain per year. The average wind speed is about 60% higher than that of Cape Town.
28. Marion Island is home to about 45 different species of insects.
29. Some of the things that scientists on Gough Island study include the impact of fisheries on the indigenous seabirds and the impact of invasive species, such as mice, on birds nesting on the islands.
30. Meteorologists, or weather scientists, help to predict the weather in South Africa by making observations and measurements in Antarctica. Low pressure cells move around the Antarctic continent and sometimes these result in a cold front in South Africa.

Ends.