

Definition:

Areas with less than 250mm of annual precipitation and average temperatures of less than 10°C in the warmest month.

Location

- Cold deserts are found at very high latitudes but they are found at different latitudes in different places.
- They occur at 51°N in Eastern Canada (because of its continental location), whereas they are not found until 70°N in Norway.
- Greenland and Antarctica are two large cold deserts.



Climate

- Most of the precipitation comes in the form of snow or fog. Annual precipitation is less than 250mm.
- More than 99% of the land area is covered by ice.
- Cold deserts have an average temperature of less than 10°C in the warmest month and temperatures can fall to below -25°C during the winter.



(Flickr Source: Roger Key)

A Pill Beetle found in cold deserts

Examples of Flora

- Plant growth is limited as there are few areas not covered by ice. There are no trees and shrubs present at all.
- The only vegetation able to survive are liverworts, lichens and mosses.

Examples of Fauna

- Few amphibians, reptiles or mammals are native to cold deserts, but humans have introduced some animals, such as rats and mice. Native fauna include spiders, earthworms, beetles and the Arctic fox.

Conservation

Cold deserts and the species that live there are extremely vulnerable to the growing issue of climate change. Rising global temperatures, which are rising more quickly in polar regions, are leading to increased ice floe melt, which not only restricts habitat space, but affects thermohaline circulation.

Conservation strategies include:

- Protected areas are being created in order to reduce human influences such as Bird Island in South Georgia being designated a Site of Special Scientific Interest.
- Before building any new infrastructure, an Environmental Impact Assessment (EIA) is undertaken to assess the possible impacts.



(Flickr Source: Eugene Kasperky)

Antarctica – an example of a cold desert.