

Arctic Plants - How do they Survive?

Approximately **1,700 species of plants** live on the Arctic tundra, including flowering plants, dwarf shrubs, herbs, grasses, mosses, and lichens.



Arctic Willow



Red Algae



Arctic Poppy

Large areas of land inside the Arctic Circle are tundra. Tundra is a harsh, treeless environment in which the soil is permanently frozen. This is called **permafrost**.



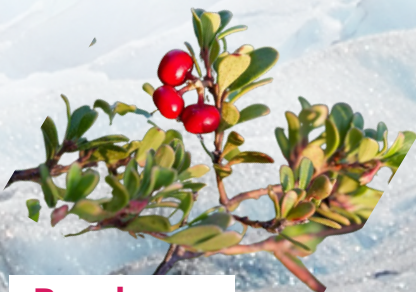
Reindeer and other animals rely on the plants of the Arctic as a source of food.



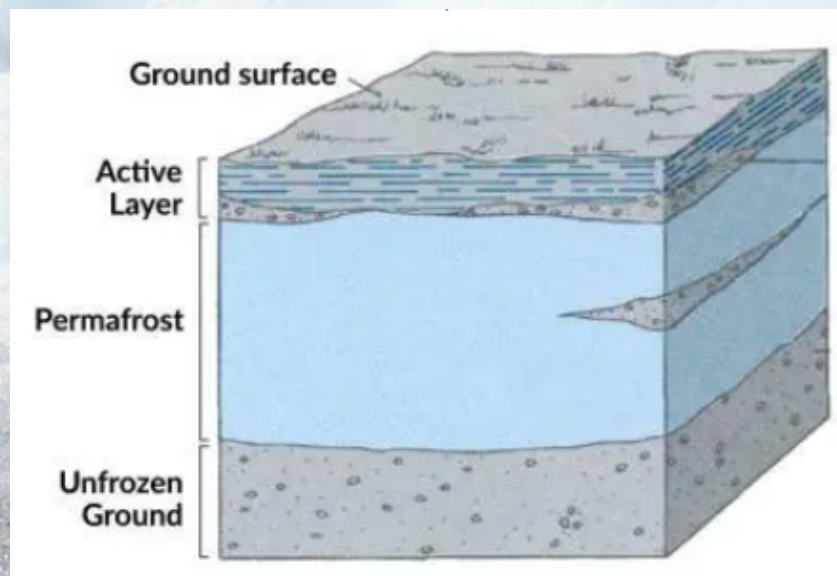
Soil that remains at temperatures below the freezing point of water for longer than **two years** (such as that found in the Arctic) is known as 'permafrost'. **Permafrost** prevents large plants (such as trees) from growing, and also hinders drainage. Shallow lakes and bogs that form in the warmer months are a feature of tundra.

Arctic Lichens are spongy and full of water. This plant is the summer food for reindeer.

Berries are the only fruit that grows in the Arctic.



Bearberry



Arctic flowers grow very quickly

Arctic tundra plants have “learned” to stay warm in Arctic climates by growing closely together in a **huddle**.

Some individual species have adapted by growing in a specific pattern, such as a rosette, which, as with the Three Toothed Saxifrage, enables the Arctic flora to trap the warmer air between plants.



Three-toothed Saxifrage



Pollination in the Arctic - The arctic Rose

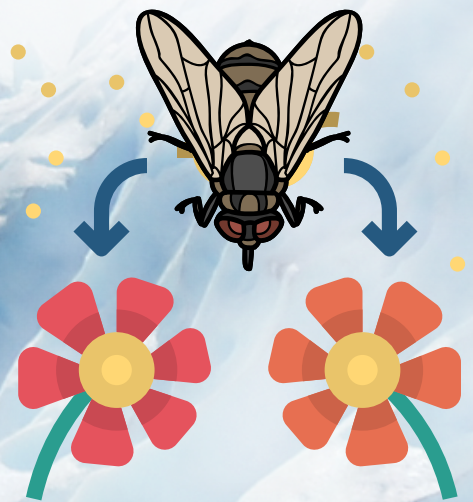
Arctic tundra plants must **grow quickly** during the limited growing season that's permitted by Arctic temperatures and sunlight. This makes the short-lived summer months very colorful.



Arctic Rose

What does the Arctic Rose offer its pollinator?

The petals reflect the sunlight heating the center of the flower up to **10 degrees** warmer than the outside temperature.



Mountain Avens



Flies are the main pollinators in the Arctic

