

The Tundra: Plant and Animal Adaptations

Plants and animals living in the Tundra must be able to adapt to extreme cold, brisk winds, very short growing seasons and the rather harsh conditions found in this Biome. They have to have special adaptations to allow them to live in extreme conditions and low temperatures. Most animal and plant life in this biome have insulation in the way of hair, fuzz, fur or feathers. (*The Tundra can also be found in the Alpine regions at high altitudes on mountains where trees don't grow*).

Plant Adaptations in the Tundra Biome

Plants in the Tundra have adapted in a variety of ways. They grow close together, low to the ground and they remain small. Many plants in the biome have a wax type of fuzzy, hairy coating on them which helps to shield them from the cold and the wind. This coating also helps them to retain heat and moisture and it protects the plant seeds to allow for reproduction. Plants found here will typically have small leaves which helps the plants to retain moisture. Only the top layer of soil thaws out in the Tundra, below that is the permafrost, therefore the plants have very shallow root systems. Plants like lichens and moss can survive on bare rock with a bit of moisture. Most of the plants in the Tundra Biome are perennials and don't die off in the winter, they have long life cycles to help with the short growing season.

Examples of Plants found in the Tundra:

Tundra means treeless, therefore most of the plants in the tundra are low growing plants. Arctic Moss, Arctic Willow, Caribou Moss, Labrador Tea, Arctic Poppy, Cotton Grass, Lichens and Moss.

Animal Adaptations in the Tundra Biome

Animals have many adaptations to survive in this harsh environment. Animals need shelter and insulation in the Tundra. The animals here tend to have thicker and warmer feathers and fur. Many of them have larger bodies and shorter arms, legs and tails which helps them retain their heat better and prevent heat loss. Many of the birds of the tundra have two coats of feathers to help keep them warm. Many animals of the Tundra have feet that are lined with fur to help keep them warm. Some of the animals of the Tundra (bears, marmot, arctic squirrels) will hibernate for the winter and others will burrow (lemmings, ermine). Many of the insects of the Tundra will spend their entire life buried in the soil, rocks or plants which acts as a shelter for them.

Examples of Animals found in the Tundra: Brown Bear, Polar Bear, Caribou, Moose, Wolverine, Lynx, Arctic Foxes, Red Foxes, Musk Oxen, Ptarmigans, Ermine, Snowy Owl.