

# The Tundra

The Tundra is the coldest of all of the biomes. The word Tundra means *treeless plain*. The ground is always frozen in the Tundra. The permanently frozen ground in the Tundra is called the permafrost, the Tundra is cold all year. Summer is very brief with some milder temperatures when the sun shines which is almost 24 hours a day. The Tundra has been called "the land of the midnight sun". One fifth of the Earth is a Tundra biome.

**Location:** The arctic Tundra is located in the Northern Hemisphere near the north pole. *(There is also a Tundra in alpine mountain tops which is called the Alpine Tundra.)*

**Weather:** The average rainfall in the Tundra ranges from 15 to 25 cm or 6 to 10 in. It never gets any warmer than 4°C-10°C or 45°F or 50° F and the wind tends to blow most of the time.

**Seasons:** Summers are very short and cool, lasting only about 6 to 10 weeks and the winters are very long and very cold. In the winter, there is minimal daylight as the sun barely rises. Summer and winter are the Tundra's 2 main seasons.

**Animals:** The animals that live in the Tundra have adapted by having extra layers of fat and long fur. Some of the animals will migrate or hibernate for the long winters. There are both herbivores (lemmings, caribou, squirrels) and carnivores (arctic foxes, wolves, polar bears) and there are insects (mosquitos, flies, moths, bees) and birds that migrate (ravens, falcons, loons) to name a few. There are very few reptiles or amphibians in the Tundra due to the extreme cold.

**Plants:** Trees do not grow in the Tundra. Plants grow and reproduce in the top layer of soil which is just above the permafrost layer. Plants only grow for the short summer season which is about 50 or 60 days when there is also lots of surface water. After that, they become dormant. The plants do not have deep root systems and most of the plants that grow in the tundra are low growing. Plants in the tundra include low shrubs, flowers, lichens, sedges, mosses, grasses and liverworts. Plants adapt in the Tundra by grouping together to survive the strong winds and cold temperatures.