Siberian Tundra (http://www.blueplanetbiomes.org/siberian\_tundra.htm)

The tundra is located at the top of the northern hemisphere in Europe, Asia and North America. It covers 20% of the earth's surface just below the polar cap. The Siberian Tundra is located in the northeastern part of Russia between 60° to 80° North latitude, and 70° to 180° East longitude.

In the tundra, winters are long and summers are short. During the winter temperatures are usually below freezing and the ground is covered with snow and ice. Summers are marshy from puddles called thermokarsts formed from melted snow and ice. The Lena, Ob and Yenisei are all permanent rivers that flow into the Siberian Tundra. Pingoes are formed from pools of water freezing under the ground and pushing the ground up into a hill. Some pingoes are 3 to 300 feet tall and a half mile wide.

The tundra is located 1,000 to 4,000 feet above sea level. In the tundra, there are two levels of soil. The first layer is called the active layer because it freezes and thaws. It is 10 inches to 3 feet deep. The second layer is called the permafrost. It stays frozen throughout the winter and summer. The permafrost in Russia can be as deep as 1,968 feet.

The climate in the Siberian Tundra in the winter is very cold. The temperature may reach -40 degrees Fahrenheit. Summers are cool with temperatures of 37 degrees to 54 degrees Fahrenheit. Precipitation is only 6 to 10 inches per year including melted snow.

The tundra is very windy. It has winds from 30 to 60 miles per hour. The windchill is so bad in the tundra, bare skin can freeze in 30 seconds.

The plants of the Siberian Tundra include fungus, grasses and shrubs growing low to the ground to be protected from the wind and the cold. They group together to keep warm. Plant roots spread out on the surface to take in water. They don't grow deep because the soil is always freezing and thawing which breaks up roots. One of their adaptions to the cold climate is tiny hairs on their leaves to help keep in moisture.

The animals of the tundra include fish, birds, mammals and insects. The animals survive with extra fat and thick fur to keep them warm. Most animals are low to the ground and their arms, legs, tails and ears are small to keep from losing heat. Hundreds of types of birds stay for the summer only.

The Yakut people inhabit the northeastern part of Siberia. To survive, they hunt, trap and fish animals.

Ruts from trucks have caused the permafrost to melt and some of those areas have become as large as lakes. There has been lots of pollution from mining. More people are moving to the tundra, which creates more waste. Because of the cold weather, the waste does not break down. With the permafrost frozen solid, they can not bury the waste either. With the rising temperature from global warming, the permafrost may begin melting which will cause flooding to the tundra. This could destroy the world's greatest biome.

In the tundra, animals are being over hunted with guns. Many animals are being hunted almost to extinction. Now there is a limit to how many animals can be killed in one year.

In Russia, areas of land have been set aside for national parks. These parks will protect the wildlife and the tundra. There are now ways to build highways across the tundra without damaging the permafrost.

By Evan S. 2002

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