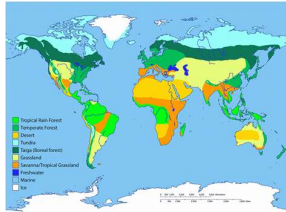


## Taiga biome

Taiga, also known as coniferous or boreal forest, is the largest terrestrial biome on Earth. It covers nearly one-fifth of the Earth's land surface in an almost unbroken belt for 7,000 miles. The origin of the name 'taiga' is Russian and means land of the little sticks which represents the predominance of needle-leafed trees. The Taiga biome is quite a harsh landscape, although not as harsh as the tundra, but is popular with tourists for activities such as cycling, hiking and canoeing.



## Location



The taiga biome is the largest terrestrial biome and is situated in the northern hemisphere, south of the arctic tundra biome. It encompasses three continents; North America, Europe and Asia. In North America, it covers most of Canada and Alaska; in Europe, it covers most of Sweden, Finland, Norway and Estonia, some of the Scottish Highlands and some areas of Iceland; in Asia, it covers most of Russia and areas of northern Kazakhstan, northern Mongolia and northern Japan.

## Physical features

Due to its location, the taiga is in the temperate climate zone resulting in two distinct contrasting seasons. Whilst this biome has short, wet summers, it also has long, cold winters. As a result, precipitation is moderate in the taiga with snow in winter and rain in summer. Furthermore, for six months of the year, the temperature is below 0°C. This means that the growing season is short; lasting only about three months during the summer when temperatures are favourable for plants.

## Diversity

There is little variety in terms of plants in the taiga. The majority of trees are conifers, which is why the taiga is referred to as the coniferous forest. Conifers - including pines, spruce, hemlock and fir - are evergreen and don't drop their leaves in autumn. This means there are few nutrients in the soil, which is why there is not much variety in the vegetation. Interestingly, taiga trees have many adaptations for surviving their environment which include a conical shape to allow snow to slip off easily as well as leaves with waxy protective coatings to lock in moisture.



Like plants, there are not many animals in the taiga. Of the ones there, brown bears are the top predator, hunting everything from deer to fish. Because of the climate, many animals of the taiga migrate to warmer areas or hibernate during the long, cold winters. Others have special adaptations including thick fur or feathers and the ability to change colour according to the season. Whilst there are not many animals in the taiga, there are millions of insects resulting in birds migrating there to feed off them.

## Human processes

Although two major cities (Toronto and Moscow) are located in the taiga biome, most of it is uninhabited. As such, you would think that it would be little impacted by human processes. Unfortunately, the taiga forests are endangered due to logging and mining, in particular, open cast tar sands mining. When trees are cut down in the

taiga, it takes a long time for new trees to grow because of the short growing season meaning that the forests are not replenished. This has impacts not only on the number of trees but also habitats, and more importantly, global warming due to the reduced capacity to absorb carbon.