

Taiga Ecosystems

Cross-Curricular Focus: Life Science



Taiga ecosystems cover large areas of North America. They are also found in Europe and Asia. A good example of a taiga ecosystem in the United States is the state of Alaska.

The weather is very cold in taiga ecosystems. The winter season lasts a long time. It gets icy cold. Storms are severe, bringing biting cold winds. Summers never get very warm and are extremely short. There isn't much precipitation in a taiga ecosystem. When moisture does fall, it usually comes in the form of dry, powdery snow.

Living in the extreme conditions of a taiga ecosystem takes a special kind of organism. Some common animals you could find in the area are moose, wolves and deer. Each animal **population** has to adapt to the severe conditions. Short, stubby grass and shrubs grow in taiga regions. Beautiful evergreen trees grow there, too. All the trees you think of when you imagine a Christmas tree are at home in the taiga. Pines, firs, and spruce trees are common. The thin, waxy leaves of evergreen trees are sometimes called needles. They hold in water all year round. They also do not freeze easily. In the taiga, temperatures drop down very low.

All green plants are an important source of oxygen for our planet. The many trees of the taiga region add oxygen to the air. Green plants go through the process of photosynthesis to make their food. They use the carbon dioxide that humans and other animals breathe out. At the end of the process, they release oxygen into the air. Since taiga ecosystems have so many trees, they help make up for areas with less plants, like the desert.

People living and working in taiga regions affect the natural balance. Activities such as hunting, trapping and fishing change the animal populations. Animals can be over-hunted and become endangered. Drilling for oil and gas destroys the soil. Harvesting trees damages animal habitats. It also robs the Earth of oxygen sources. Even tourism can cause problems. Some tourists do not respect wildlife and plants. They are willing to sacrifice the habitat for developed recreational areas. People have the right to use natural resources. They should, however, use them in a way that doesn't harm the ecosystem.

Name: _____

Answer the following questions based on the reading passage. Don't forget to go back to the passage whenever necessary to find or confirm your answers.

1) Why do you think that taiga ecosystems are home to evergreen trees?

2) Give an example of an organism that lives in the taiga.

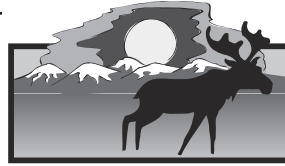
3) What do green plants release that humans breathe?

4) What is a human activity that might harm the taiga ecosystem?

5) What is summer like in the taiga?

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Name: **Key**

Answer the following questions based on the reading passage. Don't forget to go back to the passage whenever necessary to find or confirm your answers.

Actual wording of answers may vary.

1) Why do you think that taiga ecosystems are home to evergreen trees?

because it doesn't rain much in the taiga and the evergreen needles store water

2) Give an example of an organism that lives in the taiga.

grass, shrubs, evergreen trees, moose wolves or deer

3) What do green plants release that humans breathe?

oxygen

4) What is a human activity that might harm the taiga ecosystem?

hunting, trapping, fishing, drilling, harvesting trees or tourism

5) What is summer like in the taiga?

short and not very warm