

Temperate Forests

Name: _____

Date: _____

Vocabulary for this reading:

Temperate: a climate with mild temperatures

Deciduous: trees that lose their leaves in the fall and winter to conserve energy

Chlorophyll: a green pigment that converts sunlight into chemical energy

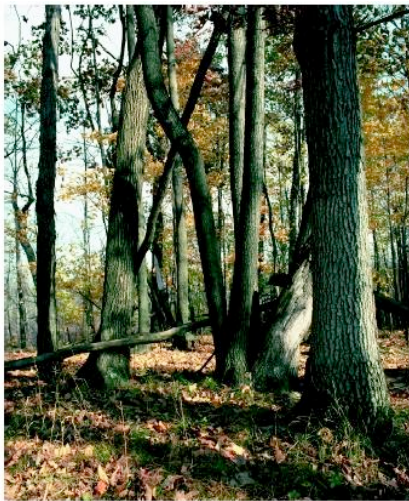
Coniferous: trees that keep their needles throughout the year

Hibernate: to spend the winter in a resting state

Migrate: to change location seasonally by moving from one region to another

Prey: an animal hunted or caught for food

Predator: an animal that survives by hunting and eating other animals



Location:

Temperate forests are mainly located in the northern hemisphere (above the equator), but are also found in New Zealand and in the southernmost part of South America. Temperate forests cover most of the eastern half of the USA, Europe as far eastward as the Black Sea, eastern Russia, and also parts of Asia like China and Japan. The temperate forest that surrounds New York City is located at 42°N 70°W.

Climate:

Temperate forests experience four distinct seasons throughout the year. In the fall, the temperatures begin to drop and the days become shorter. The average fall (September-November) temperature is 56°F. This causes **deciduous** trees to stop producing **chlorophyll**. Deciduous leaves turn colors, ranging from red to orange and yellow to brown, and eventually fall off the branches. Winters in temperate forests are cold and have short days. In New York, the average winter (December-February) temperature is 34°F. During the winter, deciduous trees are bare, but evergreen trees keep their green needles. In the spring, the weather begins to get warmer. The average spring (March-May) temperature in New York is 50°F. Deciduous trees start growing leaves, and flowers begin to blossom. By summer, all the trees are green.

Temperate Forests

and it can be very hot. The average summer (June-August) temperature in New York is 80° F. Temperate forests usually get about 30 to 60 inches of rainfall every year. Most of this precipitation happens during winter and spring.

Forests tend to survive on steeply sloping land that is unsuitable for plowing. The forest floor is made up of layers of dead leaves and needles, decaying plants and animals, soil, and stones.

Temperate Forests

Plants:

There are two main types of trees in temperate forests: deciduous and **coniferous**. Deciduous trees lose their leaves when the days grow shorter and the weather turns cold. The leaves grow back when the weather warms in the spring and the days grow longer. Examples of these trees are maple, birch, oak, and beech. Coniferous trees have needles instead of leaves and never go bare because they lose and replace needles throughout the year. Examples of coniferous trees are pine and cedar trees. They are also green all the time.

Trees are not the only plants of temperate forests. Small plants such as shrubs, moss, ferns, and lichens grow on the forest floor.

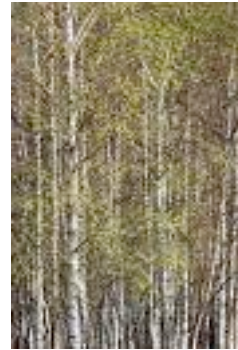
Oak Tree



Maple Tree



Birch Tree



Pine Tree



Moss



Lichen



Fern



Temperate Forests

Animals:

Animals living in temperate forests need to be able to adjust to cold winters and warm summers. This happens through **hibernating** and **migrating** to warmer places. Food supply affects where wildlife is found in temperate forests as well. In the spring and summer, food is plentiful. When winter comes, plants, fruits, and flowers are gone, which causes animals to migrate or hibernate. For example, black bears go into hibernation and sleep through winter after feasting in the fall.

Wildlife in temperate forests comes in all different sizes. They range from small insects, squirrels, and rabbits, to large birds and bears. **Prey** animals have ways to protect themselves, including camouflage, playing dead, or releasing poisons or scents. **Predator** animals use their senses to locate prey. For example, owls have excellent vision that they use to spot small animals from above. Bats use echolocation to hear where moths and other insects are.

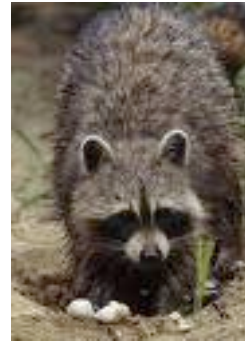
Black Bear



White tailed deer



Raccoons



American Bald Eagle



Owls



Gray Squirrel



Big Brown Bat

