

The Temperate Forest

An Introduction

The temperate forest biomes are ecosystems very rich in plant and animal life. The climate is more moderate than those of the tundra and taiga, but there are still four distinct seasons. These temperate forests are found in the eastern United States, western and central Europe, and parts of New Zealand, Japan, and China.

Most of the trees of the temperate forest are deciduous; that is, they lose their leaves in the winter. The leaves of many of these trees turn bright colors in the autumn before they fall, returning important nutrients to the soil. Deciduous trees of the temperate forest include maples, oaks, lindens, hickory, beech, and sweetgum. These trees can grow to great size. Their crowns of leaves shade the forest floor.

Early spring wildflowers grow before the trees' leaves form dense shade. They may include Dutchman's Breeches, May Apple, Jack-in-the-Pulpit, and Trillium. Other, more shade-tolerant shrubs form a carpet on the forest floor. These plants may include Rhododendrons, Azaleas, Dogwoods, Redbuds, several species of Viburnum, and Poison Ivy.

The leaves of these plants, along with their nuts, seeds, and berries, provide food for a large number of consumers. The White-tailed Deer is one of the larger herbivores (plant eaters) of the temperate forest. Its population has grown in recent years due largely to regulated hunting seasons and the decrease in natural predators. In many areas the large population of deer has caused crop damage and over-grazing of the forest shrubs and flowers. Wildlife managers are looking for ways to reduce damage caused by deer. They are also trying to prevent starvation and disease from drastically reducing the number of deer.

Another large mammal that was once plentiful in the temperate forest is the Black Bear. This animal was successful because it was an omnivore—it ate meat and vegetation. In the early spring, a bear might dig up a rotten log and dine on insect grubs or a nest of chipmunks. In the fall it might gorge itself on acorns and blackberries. Bears are hunted by humans. They also need large areas for roaming, and reduced habitat is probably the greatest cause of the decline in the temperate forest bear populations.

Many species of birds live in the temperate forest. Some of the birds are migratory, but quite a few of them survive all year in this biome. American Woodcocks probe for worms in the cool forest soils. Wild Turkeys feed on seeds and nuts that drop from the trees. Woodpeckers and creepers patrol the tree trunks looking for insects. Several species of flycatchers sit in the open just under the trees' canopy looking for flying insects. Grosbeaks, tanagers, and other colorful birds roam the tree tops looking for insects and fruit. These different birds have developed feeding strategies that allow them to take advantage of the different horizontal layers of this biome.

Name _____ Date _____

For the student:

1. What does *deciduous* mean?

2. Why do some wildflowers bloom before the trees' leaves emerge?

3. What are two factors that may have led to an increase in the number of White-tailed Deer?

4. What are two factors that may have led to the decline in the number of Black Bears?

5. What is the difference between migratory birds and resident birds?
