

# Deciduous Forests



## Range

Deciduous forests are found in the eastern half of North America, Europe, Asia, Russia, Japan, China, and a few spots in South America, Australia and New Zealand.

## Habitat

Deciduous forests are located in the earth's temperate zones, where it is colder than the rain forests zones, but milder than the conifer forest zones. They have fertile soils with a good amount of rain (30-60 inches a year). They can live with big temperature changes throughout the year -- the four seasons. In the summer the trees are in full leaf. In the fall when the days grow shorter (and the temperatures cooler), the leaves change color and fall. During the cold winter months, the trees lie resting (dormant) with no green leaves to make food. In the spring, with days lengthening and warmer temperatures, the leaves sprout and this begins the trees' 6-month growth period again.

Deciduous forests are broken down into five layers (or stratum). The tree layer (tree stratum) has tall trees from 60-100 feet tall, like oak, maple, hickory, beech and elm. The sapling or small tree layer is next with small trees, like; dogwoods and redbuds. The shrub layer follows with bushes, like; azaleas and rhododendron. Then the herb layer with yearly wildflowers, ferns and ground level plants followed at last by the ground layer with mosses, clubmosses and lichens.

## Animals

There are many kinds of animals in deciduous forests; birds, mammals, reptiles, amphibians, and insects. Many survive the long winter by hibernating, while others migrate south to milder temperatures. Still other animals hunt or forage for food all winter adapting to the cold months, by turning white to blend in and growing thick fur to keep warm.

Owls may not be seen very much, because they are active at night (nocturnal), but they are very much at home in the forest. They have large eyes, set forward on their head for eyesight. The eyes are so sensitive that they can actually see in the dark. Their necks can turn a long way to follow prey as they move. But their best hunting trick is how quiet they can fly. They can do this because they have fringed flight feathers that hide the sound of air passing through their feathers.

White-tailed deer travel in small groups through the forest. They are active mostly at twilight, though can be seen all times of day, feeding on twigs, grass, acorns. If they are startled, their tail flips up showing its bright white underside like a flag. As they run off the white flag waves from side to side to distract predators.

Black bear aren't always black, but can vary in color from tan to black. They are not as big or aggressive as grizzlies, only reaching about 300 pounds, but are still a dangerous predator. They eat almost anything to put on weight for their winter sleep, from berries, nuts and fruits to insects, small mammals and even dead animals (carion).

Bobcats prowl the forests and swamps at night, hunting small mammals and birds and sometimes a deer. They have tufted ears and a short tail with dark bars on it. Lynx are stockier with bigger ear tufts and a black tip on their short tail.

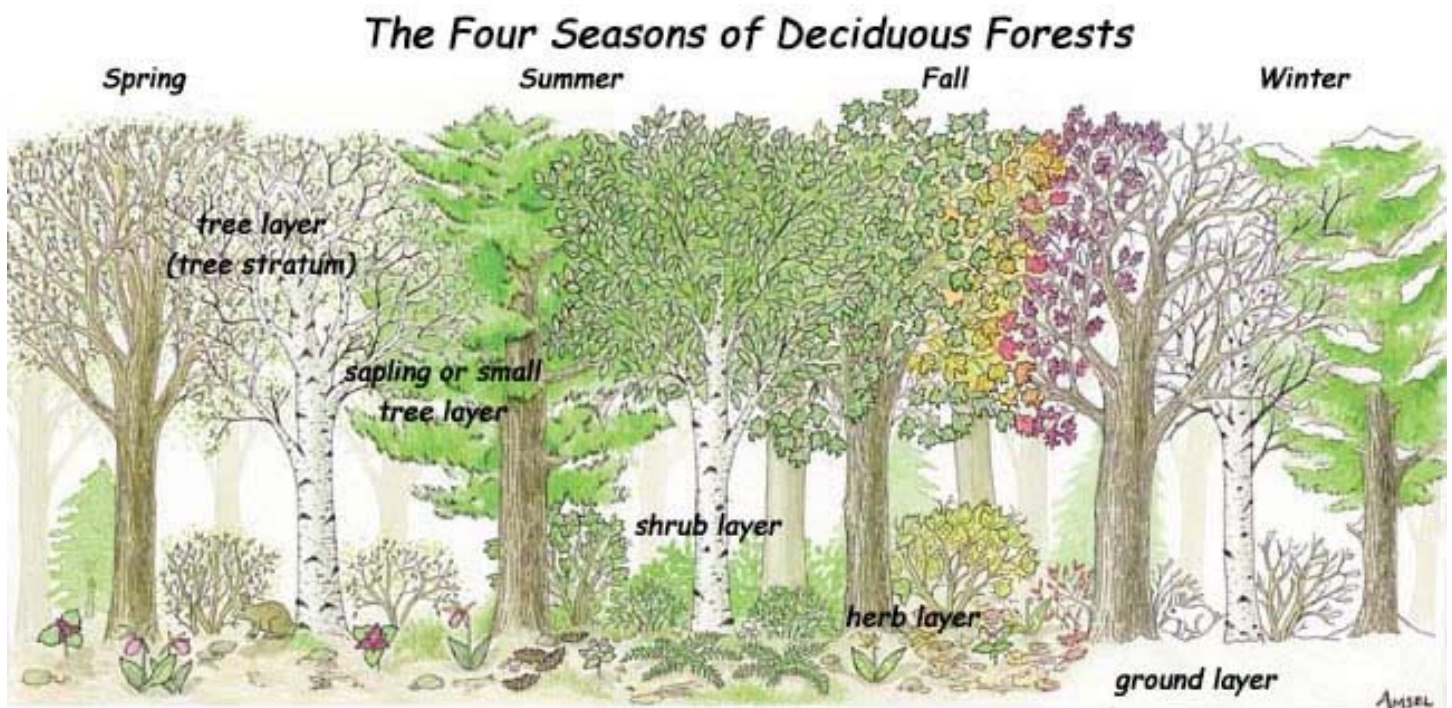
Another nocturnal mammal, the raccoon, will eat anything it can find, including human garbage. They are well known for their black face-mask and long, ringed tail.

Other deciduous forest animals include squirrels, chipmunks, mice, snakes, rabbits, hares, fox, coyote, fisher, and skunk.

## Plants

Deciduous forests have maples, oaks, hickory, beech, ash, elm, some pine, fir and spruce. Their seeds are carried off by the wind or animals for planting. Seeds are made to find their way to a place where they can grow. Acorns and seed-filled pinecones are collected by squirrels and chipmunks. When they bury them for winter, they are actually planting seeds. Maple, ash and basswood seeds spiral away from the tree like tiny helicopters searching for a sunny spot to sprout. Cottonwoods spread their seeds on the wind. Mountain ash berries are eaten by birds and brought to where they fly next. Beech, hickory and butternut seeds may be eaten by mammals and delivered somewhere else too.

The forest floor has wildflowers, like lady slipper, jack-in-the-pulpit and trillium. There are ferns, mosses and clubmosses.



## CITING RESEARCH REFERENCES

Amsel, Sheri. "Forests of the World." Deciduous Forests. Exploring Nature Educational Resource. © 2005 - 2009. November 20, 2009. <<http://exploringnature.org/db/detail.php?dbID=44&detID=573>>