

A Guide to Oregon's

FOREST WILDLIFE



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The Oregon
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Institute



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Introduction

Why do the different animals in Oregon's forests choose to live where they do? Throughout Oregon's natural history, disturbances like fires, landslides, earthquakes, windstorms, volcanic eruptions, climate changes and disease led to dramatic changes in the forest landscape and profoundly affected wildlife and its habitat. The result was a diverse natural forest landscape that changed and evolved over time. Wildlife adapted to these natural changes, over time seeking the habitat that best suited their needs.

More recently, human activities like agriculture, urban growth, timber harvesting and fire suppression have altered natural disturbance patterns. Today, taken together across the landscape, these natural and human-caused disturbances result in a diverse mosaic of forest ages and habitat features.

As natural cycles of tree growth, death and regeneration occur in the forest, species may inhabit or be absent from a given area, partly in response to continued changes in the forest structure. Any change in the forest habitat creates "winners" and "losers." Some species do best in young, open stands. Some species do best in older forest stands. Features of a particular stand, rather than the age of the stand, appear to be the most important determining factor (see chart).

This booklet describes some of the wildlife associated with stands of different age classes. Additional information to help teachers incorporate this topic into classroom discussions and activities is found on the Oregon Forest Resources Institute Web site at www.oregonforests.org.

FOREST SUCCESSION CREATES VARIED WILDLIFE HABITAT

This illustration shows Douglas-fir forest development typical of the Cascade and coastal ranges after even-aged (all trees removed at one time) harvesting. The graph below shows the number of wildlife species found within each stand type. The stand ages shown for each period vary and are intended as general guides.

Note: The reader will notice no difference in that many species live from different successional stages, but the number and representation of a different number of stages between the earliest and latest phases. These variations may be due to different geographical regions or simply natural variation, but the concept of forest development and succession is the same.

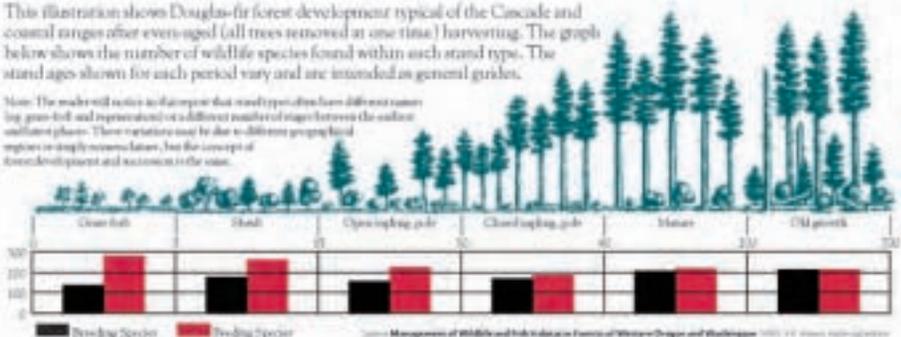




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Forest stands of all ages

Some animals are found in all age stands, moving from one type to another depending on their needs for foraging food, breeding, giving birth, raising their young, sleeping or escaping predators. In this section, you'll find the largest animals, such as the Roosevelt elk and the American black bear, and the smallest, the Pacific chorus (tree) frog.

Pacific Chorus (Tree) Frog (*Pseudacris regilla*)

Size: Length 1.5 inches (4 cm).

Diet: Algae, insects including ants, flies, centipedes and beetles, spiders and slugs, and snails and other invertebrates.

Habitat: Occurs throughout Oregon in riparian, mixed conifer, lodgepole pine, ponderosa pine, aspen, white oak and mixed conifer-hardwood forest types and in subalpine parklands.

Preferred forest habitat age: All forest ages, primarily associated with ponds where it breeds.

Principal predators: Lizards, snakes, bullfrogs and herons.

Reproduction: These frogs each lay between 400-750 eggs a year. Their use of temporary ponds helps them to avoid predators associated with permanent wetlands.

Did you know... This species of frog is the one we commonly hear vocalizing (croaking) in the spring.



Common Garter Snake (*Thamnophis sirtalis*)

Size: Length 48 inches (122 cm).

Diet: Small mammals, birds, amphibians, reptiles, fish, insects, mollusks and other invertebrates.

Habitat: Widespread in Oregon, found in riparian, mixed conifer, lodgepole pine, ponderosa pine, aspen, white oaks and mixed conifer-hardwood forest types and in subalpine parklands.

Preferred forest habitat age: All forest ages

Principal predators: Hawks, owls, cats, raccoons, mink and people.

Reproduction: This snake is a livebearer, giving birth to 10-18 young per litter.

Did you know... This snake is the most widely distributed reptile in North America.

American Black Bear

(*Ursus americanus*)



Size: Length 60 inches (152 cm).

Diet: Vascular plants, insects, seeds or nuts, berries and fruit, sap, mammals, fish and carrion (dead and decaying animal tissue).

Habitat: Occurs mostly within forest areas in Oregon. Lives in riparian, mixed conifer, lodgepole pine, ponderosa pine, aspen, white oak and mixed conifer-hardwood forest types and in subalpine parkland.

Preferred forest habitat age: All forest ages; feeding mostly in young stages. Dens in large stumps or hollow logs and trees in different stages.

Principal predators: People. Adult male black bears will kill cubs.

Reproduction: Average of two cubs per litter, born while the female is in hibernation.

Did you know... Black bears have home ranges of up to several square miles, with those of males being several times larger than females.

Bobcat

(*Lynx rufus*)

Size: Length 30 inches (76 cm).

Diet: Birds and small mammals including voles, mice, rabbits and squirrels.

Habitat: Lives throughout Oregon in riparian, mixed conifer, lodgepole pine, ponderosa pine, aspen, white oak and mixed conifer-hardwood forest types.

Preferred forest habitat age: All forest ages; more abundant in young forest stands where prey such as mice, rabbits and mountain beaver are most abundant.

Principal predators: Mountain lions and people prey upon adult bobcats, while owls may attack the young.

Reproduction: One to six young in a litter, and one litter per year.

Did you know... This species occurs in a range of habitats, from the desert to dense coastal forests.



Coyote

(*Canis latrans*)

Size: Length 44 inches (111 cm).

Diet: Small mammals, birds, carrion (decaying animals), insects and fruit.

Habitat: Widespread in Oregon occurring in riparian, mixed conifer, lodgepole pine, ponderosa pine, aspen, white oak and mixed conifer-hardwood forest types and in subalpine parklands, alpine grasslands and shrublands, shrub-steppe, and agricultural and urban areas.

Preferred forest habitat age: All forest ages as well as most other habitats. Most frequently occurs in young forest stands where prey densities are highest.

Principal predators: People; hawks or eagles may take pups.

Reproduction: Usually seven young per litter and one litter a year, born in an underground den where they remain for several weeks.

Did you know... The coyote has a large home range with many habitats, including urban settings.



Mountain Lion (Cougar)

(*Felis concolor*)

Size: Length 72 inches (183 cm).

Diet: Mammals and birds.

Habitat: Widespread in Oregon found in association with timbered areas. Occurs in riparian, mixed conifer forests, lodgepole pine, ponderosa pine, aspen, white oak and mixed conifer-hardwood forest types and in subalpine parklands.

Preferred forest habitat age: All forest ages. Feeding is focused on younger forest ages where prey species (deer, elk, rabbit) are most abundant.

Principal predators: No natural predators except people.

Reproduction: Usually three young in a litter, and one litter per year.

Did you know... This species may have a home range of 50 square miles or more.



Black-tailed Deer (*Odocoileus hemionus*)

Size: Length 66 inches (168 cm).

Diet: Vascular plants including grasses, forbs, trees and shrubs like trailing blackberry, thimbleberry and red huckleberry, red alder, Douglas-fir, western red cedar, hazel, vine maple and lichens.

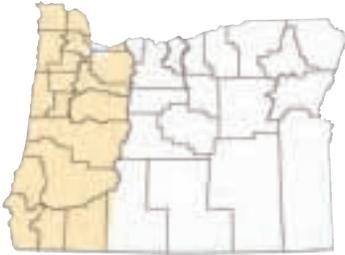
Habitat: Occurs in western Oregon and inhabits riparian, mixed conifer, mixed conifer-hardwood, ponderosa pine and white oak forest types and in subalpine parklands, grasslands, and agricultural and urban areas.

Preferred forest habitat age: Young to old forest ages, but young forest stands are most important for feeding and fawning; older ages are used for hiding cover and shelter.

Principal predators: Mountain lions, bobcats, bears, coyotes, dogs and people.

Reproduction: One to two fawns per year; young are able to travel with the mother shortly after birth.

Did you know... An older female often leads black-tailed deer groups.



Roosevelt Elk (*Cervus elaphus*)

Size: Length 84 inches (213 cm).

Diet: Trees and shrubs including trailing blackberry, huckleberry, salal, vine maple, salmonberry, Douglas-fir, western hemlock, western red cedar and grasses.

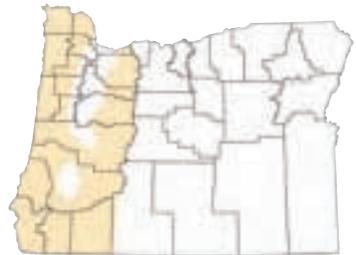
Habitat: Found in western Oregon where it utilizes riparian, mixed conifer, mixed conifer-hardwood and white oak forest types and in subalpine parklands, grasslands and agriculture areas.

Preferred forest habitat age: All forest ages but most heavily associated with young stands where food is most abundant. Forested areas are used for shelter and as hiding and escape cover from predators.

Principal predators: Mountain lion, bears and people.

Reproduction: Usually gives birth to one calf a year; twins are rare.

Did you know... Oregon has two kinds of elk, the Roosevelt elk on the west side of the Cascade Range and the Rocky Mountain elk on the eastside.





Young open forest stands

This condition occurs following a disturbance like wind, fire or timber harvest that has removed most of the larger trees and lasts up to 15 years. This early stage of the regenerative process is characterized by tree seedlings or saplings along with a variety of herbs and shrubs. This age forest attracts wildlife species that prefer the openness and associated vegetation. The animals listed below are some of the species associated with this type of habitat.

CLOSELY ASSOCIATED

*Striped skunk
Badger
Common nighthawk
Western bluebird
American goldfinch
Creeping vole
Chipping sparrow
Northern pocket gopher
Mountain beaver
Deer mouse
Dusky flycatcher
Western jumping mouse
MacGillvray's warbler
Fox sparrow
Lazulli bunting
Spotted towhee
Northern alligator lizard*

GENERALLY ASSOCIATED

*Black bear
Red fox
Black-tailed deer
Song sparrow
Dark-eyed junco
American robin
Ensatina salamander
Long-eared bat
Common garter snake
Rubber boa
Roosevelt elk
Coyote
Raccoon
Cougar
Bobcat*

Northern Alligator Lizard

(Elgaria coerulea)

Size: Length 10 inches (25 cm).

Diet: Insects including grasshoppers, termites, bugs, beetles, moths, spiders and mollusks and other lizards.

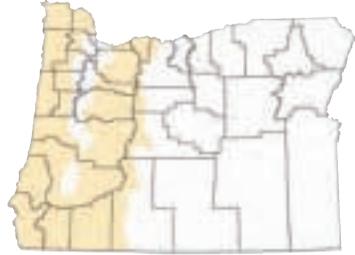
Habitat: Occurs mostly in western Oregon and the foothills of the east slope of the Cascades in riparian, mixed conifer, ponderosa pine, white oak and mixed conifer-hardwood forest types.

Preferred forest habitat age: Young open stands. Utilizes clearings for foraging and basking.

Principal predators: Snakes including racers, rattlesnakes and garter snakes, loggerhead shrikes, red-tailed hawks, coyotes and domestic cats.

Reproduction: This lizard gives birth to three to eight fully developed young per litter.

Did you know... This lizard hibernates during the winter.



Western Bluebird

(Sialia mexicana)

Size: Length 7 inches (18 cm); wingspan 13.5 inches (34 cm).

Diet: Insects such as beetles, ants, moth larvae, grasshoppers, sow bugs, earthworms, mollusks, other invertebrates, fruits and berries.

Habitat: Widespread in Oregon and lives in cavities in riparian, mixed conifer, ponderosa pine, white oak and mixed conifer-hardwood forest types.

Preferred forest habitat age: Young forest stands for feeding and nesting where it utilizes cavities formed by other birds.

Principal predators: Cats and raccoons prey on eggs, young and adults. European starlings and house sparrows compete with bluebirds for nest sites.

Reproduction: Eggs are incubated for about two weeks in abandoned woodpecker nest cavities. Bluebirds may have two broods per year.

Did you know... This species readily uses nest boxes in agricultural and urban areas and its populations have increased in recent years due to volunteer nest box programs.

Fox Sparrow (*Passerella iliaca*)



Size: Length 7 inches (18 cm); wingspan 10.5 inches (27 cm).

Diet: Insects such as beetles, flies, millipedes and spiders, other invertebrates, seeds, nuts and fruit.

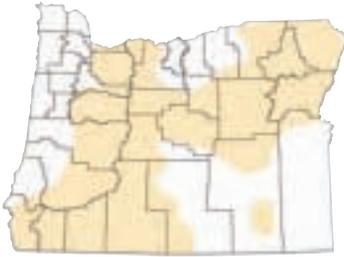
Habitat: Widespread in Oregon, inhabits riparian, mixed conifer, lodgepole pine, ponderosa pine, mixed conifer-hardwood forest types and in subalpine parklands.

Preferred forest habitat age: Young forest stands for nesting and feeding; prefers thick shrubby vegetation.

Principal predators: Shrikes, small hawks and small falcons such as merlins, owls, weasels, foxes and cats.

Reproduction: Three to five eggs, incubated for 12-14 days.

Did you know... This bird is often seen on the ground where it kicks away the ground cover to find food.



Spotted Towhee (*Pipilo maculatus*)

Size: Length 8.5 inches (22 cm); wingspan 11.5 inches (29 cm).

Diet: Plant material including grasses, shrubs seeds, fruits and berries. In the spring, the diet is largely animal material including sow bugs, millipedes, spiders and snails.

Habitat: Prefers thick brush near open areas in young forests.

Preferred forest habitat age: Recently harvested areas and young forest stands dominated by shrubby vegetation.

Principal predators: Hawks, coyotes, bobcats, foxes and snakes.

Reproduction: Two to six offspring per brood. This bird often has two broods per year.

Did you know... The spotted towhee is often heard noisily scratching around through dead leaves on the ground in search of food.



Mountain Beaver

(*Aplodontia rufa*)

Size: Length 14 inches (36 cm).

Diet: Vascular plants, primarily ferns in the coast range, red alder, salal, salmonberry, Douglas-fir and western red cedar.

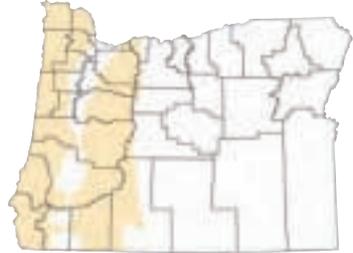
Habitat: Western Oregon in riparian, conifer and mixed conifer-hardwood forest types.

Preferred forest habitat age: Young forest stands where it excavates and occupies an extensive burrow system and feeds on herbaceous vegetation like ferns and shrubs, and tree seedlings.

Principal predators: Bobcats, coyotes, long-tailed weasels, minks, hawks and owls.

Reproduction: Mating occurs in February; a litter of one to three is born in the burrow about a month later.

Did you know... This species is able to climb trees and is not related to the stream beaver.



Striped Skunk

(*Mephitis mephitis*)

Size: Length 24 inches (61 cm).

Diet: Insects and other invertebrates, small mammals, birds and their eggs.

Habitat: Occurs throughout Oregon, inhabits riparian, mixed conifer, ponderosa pine, white oak, mixed conifer-hardwood forest types and in agriculture and urban areas.

Preferred forest habitat age: Young to middle-aged forest stands; more commonly associated with agricultural lands, meadows and brushy areas where they find food.

Principal predators: Great horned owls, barred owls, red-tailed hawks, coyotes and red foxes.

Reproduction: Two to 10 young per litter, and one litter per year.

Did you know... This species may dig burrows or den in hollow logs and brush piles.

Northern Pocket Gopher (*Thomomys talpoides*)



Size: Length 8 inches (20 cm).

Diet: Plant roots, leaves and seeds, bark of trees and shrubs below ground or under snow.

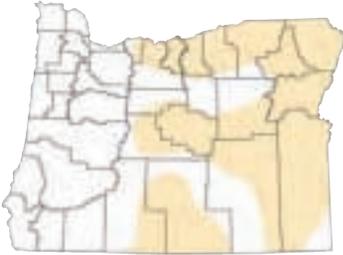
Habitat: Found in eastern Oregon living in riparian, mixed conifer, lodgepole pine, ponderosa pine and aspen forest types and in subalpine parkland and agriculture and shrub-steppe areas.

Preferred forest habitat age: Young forest stands where it lives in burrows and feeds on grasses and weedy plants associated with disturbance, and roots and stems of trees and shrubs.

Principal predators: Badgers, weasels, coyotes, owls, hawks and gopher snakes.

Reproduction: Four to seven young per litter.

Did you know... Pocket gophers make extensive tunnel systems underground that may be up to 500 feet in length, and during winter excavate and travel through burrows in the snow.



Deer Mouse

(*Peromyscus maniculatus*)

Size: Length 7 inches (18 cm).

Diet: Insects and insect eggs, seeds, nuts, fungi and fruit.

Habitat: Occurs throughout Oregon inhabiting riparian, mixed conifer, lodgepole pine, ponderosa pine, aspen, white oak and mixed conifer-hardwood forest types and in subalpine parklands.

Preferred forest habitat age: All forest ages, but most abundant in young forest stands.

Principal predators: Serves as a main food item for all predators that eat mice, including snakes, coyotes, hawks and owls.

Reproduction: Breeds throughout the spring and summer with litter sizes that vary from four to seven young. The young may begin breeding at two months of age.

Did you know... Deer mice are primarily nocturnal animals.





Middle-aged forest stands — 15 to 70 years

Middle-aged forest stands occur after young stands have grown to a point where natural crowding or thinning results in the elimination of smaller and weaker trees and the forest canopy has opened up enough to allow the re-establishment of ground vegetation and the beginning of an understory. Many species use this type of structure, though none exclusively. The animals listed below are some of the species that gravitate to this type of habitat.

GENERALLY ASSOCIATED

*Snowshoe hare
Ruffed grouse
Sharp-shinned hawk
Townsend warbler
Band-tailed pigeon
Black throated gray warbler
Bushy-tailed woodrat
Swainson's thrush
Gray jay
Red-tailed hawk
Steller's jay
Hairy woodpecker
Great horned owl
Douglas squirrel
Coopers hawk
Long-tailed weasel
Marten*

*Black-tailed deer
Chestnut-backed chickadee
Pacific-slope flycatcher
Red-breasted nuthatch
Hermit warbler
Wilson's warbler
Ensatina salamander
Common garter snake
Rubber boa
Pacific tree frog
Winter wren
Roosevelt elk
Coyote
Raccoon
Cougar
Bobcat
Northern alligator lizard
Long-toed salamander*

Red-tailed Hawk

(Buteo jamaicensis)

Size: Length 22 inches (56 cm); wingspan 52 inches (132 cm).

Diet: Small mammals, birds, amphibians, reptiles and carrion (dead and decaying animals).

Habitat: Found throughout Oregon in open areas associated with riparian, mixed conifer, ponderosa pine, white oak, aspen and mixed conifer-hardwood forest types and in grasslands and agricultural areas.

Preferred forest habitat age: Middle-aged forest stands for nesting; uses both conifer and hardwood trees; feeds in young forest stands, but most commonly feeds in grasslands and agricultural areas.

Principal predators: Raccoons and great horned owls feed on eggs and young birds.

Reproduction: Two to three offspring per season. The nest is usually in a tall tree bordering an open area. The male brings food to the female incubating the eggs.

Did you know... Concentrations of red-tailed hawks are commonly seen in the Willamette Valley and other agricultural areas in winter.



Sharp-shinned Hawk

(Accipiter striatus)

Size: Length 11 inches (28 cm); wingspan 13 inches (33 cm).

Diet: Small birds like warblers, sandpipers, doves, and finches, small mammals, lizards, frogs and insects.

Habitat: Widespread in Oregon. Lives in riparian, mixed conifer, lodgepole pine, ponderosa pine, white oak, aspen and mixed conifer-hardwood forest types and in subalpine parklands.

Preferred forest habitat age: Middle-aged forest stands for nesting. Feeds in forests of all ages. The short, broad wings allow this hawk to maneuver through thick foliage in pursuit of prey.

Principal predators: Other hawks, falcons and owls.

Reproduction: Three to five young per season are produced in a twig nest on a branch or fork in a tree.

Did you know... The male hawk brings food to the female while she incubates the eggs and after they hatch.

Hairy Woodpecker

(Picoides villosus)



Size: Length 9.5 inches (24 cm); wingspan 15 inches (38 cm).

Diet: Insects and their eggs, other invertebrates, seeds, nuts and fruit.

Habitat: Found throughout Oregon. Associated with trees in urban, agriculture and riparian, mixed conifer, lodgepole pine, ponderosa pine aspen, white oak and mixed conifer-hardwood forest types and in subalpine parklands.

Preferred forest habitat age: Middle-aged to older forest stands for nesting where it excavates a nesting cavity in a dead or diseased tree; feeds in middle-aged and older forest stands and on the ground.

Principal predators: Hawks, weasels and martens.

Reproduction: Usually has four eggs, incubated by the male and female alternately for about 12 days.

Did you know... This species drums rapidly on trees with its bill, making a buzzing sound during the breeding season.

Steller's Jay

(Cyanocitta stelleri)

Size: Length 13 inches (33 cm); wingspan 19 inches (48 cm).

Diet: Birds and their eggs, insects, other invertebrates, carrion, seeds, nuts and fruit.

Habitat: Inhabits timbered areas throughout Oregon in riparian, mixed conifer, ponderosa pine, white oak and mixed conifer-hardwood forest types.

Preferred forest habitat age: Middle-aged to older forest stands for nesting; feeds in trees and on the ground in forests of all ages.

Principal predators: Owls and hawks.

Reproduction: Two to six eggs are incubated for 16 days in a nest built in a conifer tree up to 100 feet above ground.

Did you know... This species is known for eating eggs and the young of other birds, including those of the threatened marbled murrelet.



Chestnut-backed Chickadee

(Poecile rufescens)

Size: Length 5 inches (13 cm); wingspan 7.5 inches (19 cm).

Diet: Insects such as beetles, caterpillars, wasps, moths, ants, tree hoppers, spiders, other invertebrates, seeds, berries such as poison oak, nuts and fruit.

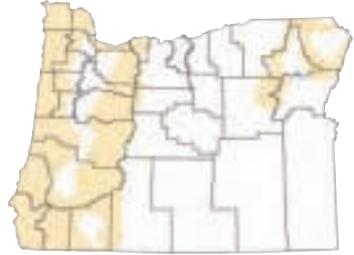
Habitat: Mostly found in western or northeastern Oregon associated with riparian, mixed conifer and mixed conifer-hardwood forest types and in groups of trees within urban areas.

Preferred forest habitat age: Dense middle-aged and older forest stands for nesting, where it excavates a cavity in well-decayed wood or uses an abandoned woodpecker hole.

Principal predators: Hawks, weasels, chipmunks and squirrels.

Reproduction: Usually has five to seven eggs.

Did you know... A large part of the diet of this species is made up of insects and spiders that it gleans from tree bark.



Great Horned Owl

(Bubo virginianus)

Size: Length 24 inches (61 cm); wingspan 54 inches (137 cm).

Diet: Small mammals, birds, amphibians and reptiles.

Habitat: Occurs throughout Oregon in areas of riparian, mixed conifer, lodgepole pine, ponderosa pine, aspen, white oak and mixed conifer-hardwood forest types and in subalpine parkland.

Preferred forest habitat age: Middle-aged or older forest stands where it uses a large tree for nesting. Feeding occurs in younger forest stands and other open areas including deserts, grasslands and agricultural fields.

Principal predators: Crows, jays, people and other great horned owls.

Reproduction: One to six young in nests placed in

tree cavities, caves, ledges and in abandoned nests of hawks or crows.

Did you know... This species is found throughout most of the western hemisphere.





Snowshoe Hare (*Lepus americanus*)

Size: Length 15 inches (38 cm).

Diet: Shrubs, tree seedlings and grasses.

Habitat: Inhabits mountain areas of Oregon in riparian, mixed conifer, lodgepole pine, ponderosa pine, aspen, white oak and mixed conifer-hardwood forest types and in subalpine parklands.

Preferred forest habitat age: Young to middle-aged forest stands.

Principal predators: Coyotes, bobcats, lynx, red foxes, weasels and people.

Reproduction: Two to five young per litter, and may have two to three litters a year.

Did you know... The snowshoe hare changes color in the winter months from brown to white, although in milder coastal areas, most snowshoe hares remain brown.



Douglas' Squirrel (*Tamiasciurus douglasii*)

Size: Length 14 inches (36 cm).

Diet: Nuts, fruit, sap, birds and their eggs, insects, tree seeds and fungi.

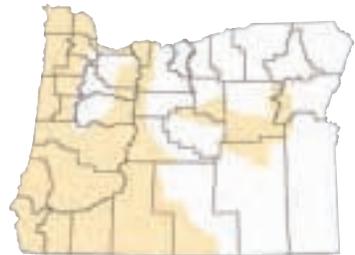
Habitat: Widespread in western Oregon and inhabits mixed conifer, lodgepole pine, ponderosa pine, white oak and mixed conifer-hardwood forest types.

Preferred forest habitat age: Middle-aged and older forest stands where it builds a leaf nest or utilizes a cavity for breeding and resting.

Principal predators: American marten, bobcats, house cats, hawks and owls.

Reproduction: One to eight young per year with four as an average litter size.

Did you know... This species stores large accumulations of conifer cones containing seeds, which it feeds on in winter.





Older forest stands — 70 to 100+ years

Larger trees, a more varied and complex canopy and a more highly developed understory distinguish older forest stands. Larger amounts of downed wood and snags found in older forests also attract certain species of wildlife. The following species are among those that use this type of habitat.

CLOSELY ASSOCIATED

*Marbled murrelet
Varied thrush
Pileated woodpecker
Pygmy nuthatch
Vaux's swift
Spotted owl
Red tree vole
Northern goshawk
Northern flying squirrel
Oregon slender salamander
Cooper's hawk
Pine siskin
Hoary bat*

GENERALLY ASSOCIATED

*Fisher
Marten
Black bear*

*Spotted skunk
Brown creeper
Myotis bat
Douglas squirrel
Red-breasted nuthatch
Chestnut-backed chickadee
Ensatina salamander
Pacific-slope flycatcher
Hermit warbler
Rubber boa
Pacific tree frog
Roosevelt elk
Coyote
Raccoon
Cougar
Bobcat
Northwestern garter snake
Winter wren
Black-tailed deer
Black-backed woodpecker*

Oregon Slender Salamander

(Batrachoseps wrighti)

Size: Length 3.5 inches (9 cm).

Diet: Insects and insect eggs, mollusks and other invertebrates like spiders, snails and earthworms.

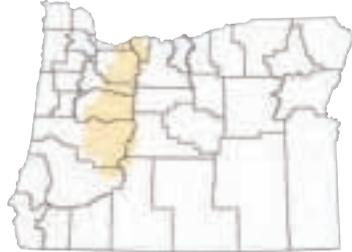
Habitat: Inhabits west slopes of the Cascades mostly in riparian and mixed conifer-hardwood forest types.

Preferred forest habitat age: Middle-aged and older forest stands.

Principal predators: Other animals that use the same streams and banks such as minks, mergansers, river otters, water shrews, trout and other fishes.

Reproduction: Three to 11 eggs per nest are laid in the springtime and hatch after three to four months.

Did you know... The tail of this species may break off when attacked...a defense against predators.



Marbled Murrelet

(Brachyramphus marmoratus)

Size: Length 10 inches (25 cm); wingspan 16 inches (41 cm).

Diet: Fish such as Pacific sand lance, northern anchovy, Pacific herring, surf smelt and mollusks and other invertebrates.

Habitat: Near shore areas of the ocean except during breeding when it utilizes coastal coniferous forests.

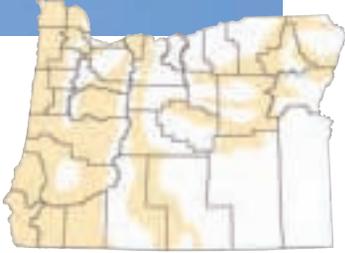
Preferred forest habitat age: Older forest stands for nesting where it nests on a large moss-covered limb.

Principal predators: Falcons and owls prey on adults; jays and red squirrels consume eggs.

Reproduction: Lays one egg on limbs of trees lined with moss or conifer needles and has an incubation period of about 28 days.

Did you know... This species feeds in near-shore area of the ocean and may fly up to 50 miles from the ocean to nest on suitable limbs in old forest.





Vaux's Swift (*Chaetura vauxi*)

Size: Length 4.5 inches (11 cm); wingspan 12 inches (30 cm).

Diet: Flying insects including mosquitoes, flies, ants, bees, plant-hoppers, aphids, moths and mayflies.

Habitat: Widespread in Oregon, feeds over open water and nests in cavities in riparian, mixed conifer, ponderosa pine, white oak and mixed conifer-hardwood forest types and in urban areas.

Preferred forest habitat age: Older forest stands, using large hollow snags where it often nests in a colony; feeds over water, the forest canopy and openings in the forest.

Principal predators: Weasels, raccoons, opossums and hawks.

Reproduction: Three to seven eggs are incubated by both parents for 18-20 days and the young fledge about a month after hatching.

Did you know... The nests made by the Vaux's swift are held together by their own hardened saliva.

Spotted Owl (*Strix occidentalis*)

Size: Length 18 inches (46 cm); wingspan 45 inches (114 cm).

Diet: Small mammals such as northern flying squirrels, western red-backed and red tree voles and dusky-footed wood rats, small birds and insects.

Habitat: Mostly found in western Oregon inhabiting older stands of riparian, mixed conifer and conifer-hardwood forest types.

Preferred forest habitat age: Older forest stands for nesting, older and middle-aged stands for foraging and dispersing.

Principal predators: The great horned owl, barred owl and northern goshawk. Squirrels, other rodents and jays feed on the eggs.

Reproduction: An average of two to four eggs are laid in a cavity or platform in a large tree. The male brings food to the incubating female and newly hatched young.

Did you know... The spotted owl is a threatened species that competes for nest sites with a similar, non-threatened species, the barred owl.



Pileated Woodpecker

(Dryocopus pileatus)

Size: Length 18 inches (46 cm); wingspan 29 inches (74 cm).

Diet: Insects such as carpenter ants, beetles, termites and other invertebrates, seeds, nuts, fruit and berries.

Habitat: Widespread throughout Oregon. Associated with large trees occurring in riparian, mixed conifer, ponderosa pine and mixed conifer-hardwood forest types.

Preferred forest habitat age: Older forest stands for nesting; because of its large size it requires a large live or dead tree where it excavates a cavity for nesting and roosting.

Principal predators: Squirrels, tree climbing snakes and hawks.

Reproduction: Both parents incubate a clutch of four or five eggs. The family group of parents and young birds remains together for some time after the young fledge.

Did you know... Many other species of birds and mammals utilize abandoned pileated woodpecker cavities for nesting and roosting.



Hoary Bat

(Lasiurus cinereus)

Size: Length 5.5 inches (14 cm).

Diet: Flying insects such as flies, moths, mosquitoes, beetles and dragonflies.

Habitat: Widespread in Oregon. Uses trees for roosting and nesting. Feeds in the air along edges of riparian, mixed conifer, lodgepole pine, ponderosa pine, aspen, white oak and mixed conifer-hardwood forest types. Also found in agricultural and urban areas.

Preferred forest habitat age: Middle-aged to older stands where it nests and roosts in trees. Feeding occurs over water and brushy areas along forest edges, usually within 12-15 feet of the ground.

Principal predators: Hawks, owls, weasels and snakes.

Reproduction: Usually two young per litter, and normally mates in the fall with young born in spring.

Did you know... This is the most widely distributed bat in North America. The female may carry young less than a week old along when foraging.

Northern Flying Squirrel (*Glaucomys sabrinus*)



Size: Length 11 inches (28 cm).

Diet: Fungi, lichens, insects, seeds, nuts, fruit, sap and birds and their eggs.

Habitat: Occurs in many forested areas of Oregon including riparian, mixed conifer, lodgepole pine, ponderosa pine, white oak and mixed conifer-hardwood forest types.

Preferred forest habitat age: Middle-aged and older forest stands where it utilizes a tree cavity for nesting and roosting.

Principal predators: Owls, weasels and martens.

Reproduction: A single litter of two to four young is produced each year. The preferred nest site is a cavity; a nest of moss, bark and lichens is built where cavities are lacking.

Did you know... This species is the principal food item of the threatened spotted owl in some parts of the northwest.



Red Tree Vole (*Arborimus longicaudus*)

Size: Length 7 inches (18 cm).

Diet: Almost exclusively Douglas-fir needles, but also eats needles of other conifer species and the bark of twigs.

Habitat: Found in western Oregon in moist coniferous forests in middle-aged and older stands.

Preferred forest habitat age: Middle-aged to old forest stands where it feeds on conifer needles and utilizes them to construct a nest.

Principal predators: Owls, hawks and snakes.

Reproduction: This species breeds throughout the year and has two or three young per litter.

Did you know... This species spends its entire life in the tree canopy and is a major prey item of the spotted owl in some areas.

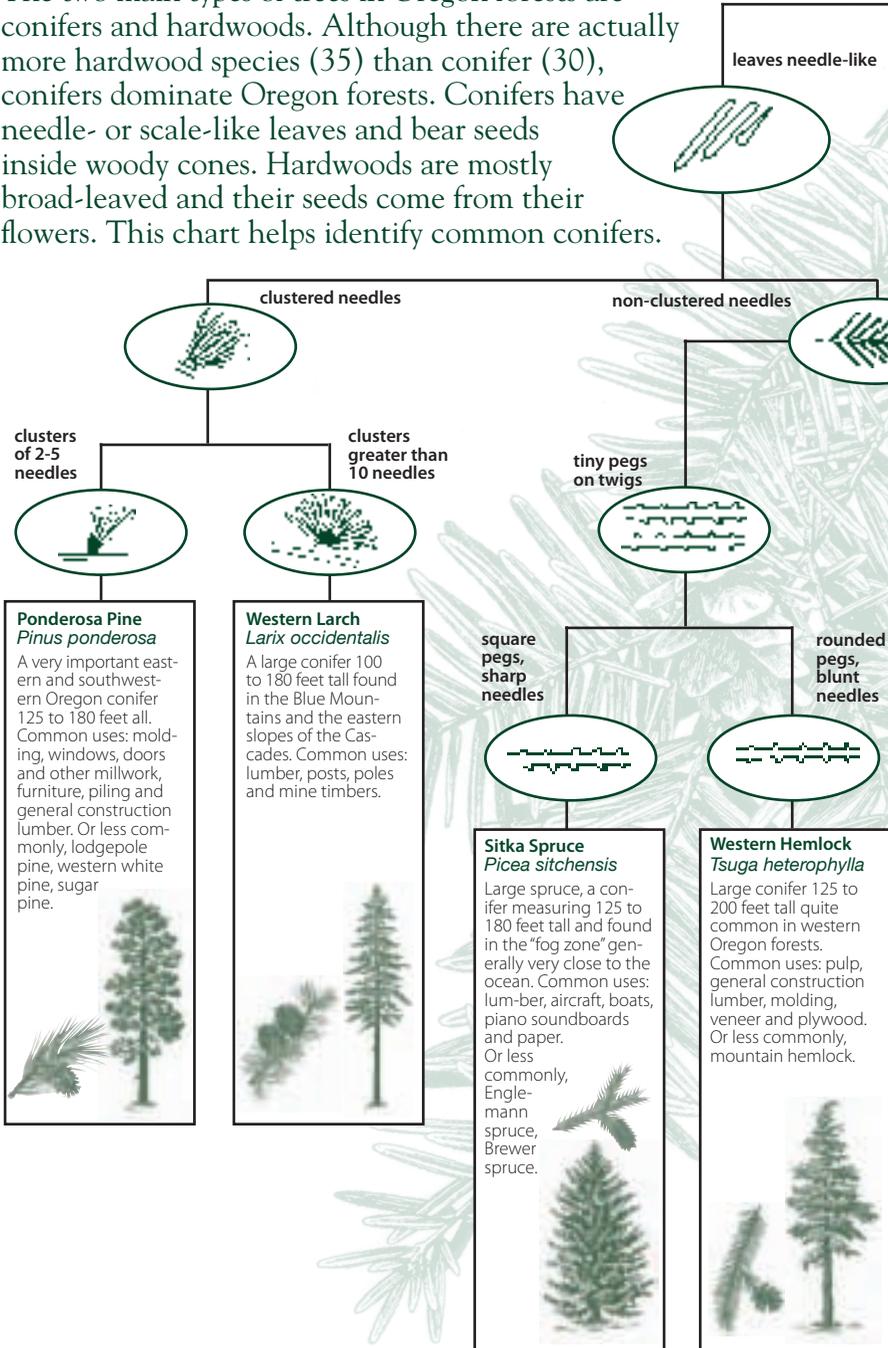




Oregon trees and other plants

Identifying Oregon's Common Trees

The two main types of trees in Oregon forests are conifers and hardwoods. Although there are actually more hardwood species (35) than conifer (30), conifers dominate Oregon forests. Conifers have needle- or scale-like leaves and bear seeds inside woody cones. Hardwoods are mostly broad-leaved and their seeds come from their flowers. This chart helps identify common conifers.



Identifying Conifers Of Oregon

leaves flattened and scale-like



Western Redcedar *Thuja plicata*

Large conifer 150 to 200 feet tall found in western Oregon along river bottoms, flats and mountain slopes. Common uses: lumber for siding, interior finish, boat building, fences, poles, posts, shakes and shingles. Or less commonly, incense cedar, white cedar, Port Orford cedar, Alaska cedar, western juniper.



no pegs on twigs

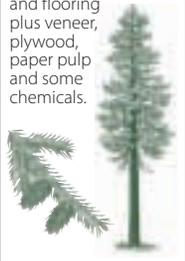


large, pointed buds



Douglas-Fir *Pseudotsuga menziesii*

A large conifer 100 to 250 feet tall predominant in western Oregon and common east of the Cascades, especially at mid-to-high elevations. Common uses: structural products such as lumber, beams, trusses and flooring plus veneer, plywood, paper pulp and some chemicals.



buds round and clustered



Noble Fir *Abies procera*

A large conifer 150 to 200 feet tall common at middle to high elevations in the Cascade and Siskiyou mountains. Common uses: lumber, plywood, pulp for paper products and Christmas trees. Or less commonly, white fir, grand fir, subalpine fir, Pacific silver fir, others.

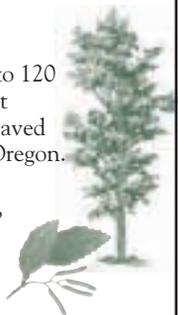


Common Oregon Hardwood Trees

Red Alder

Alnus rubra

A hardwood 30 to 120 feet tall, the most common broadleaved tree in western Oregon. Common uses: furniture, pallets, wooden ware, plugs for paper rolls and toys.



Bigleaf Maple

Acer macrophyllum

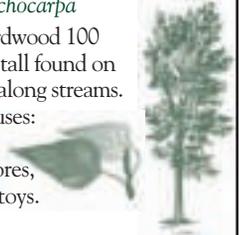
A hardwood 40 to 100 feet tall found commonly in western Oregon forests. Common uses: furniture, flooring, paneling and paint brush handles.



Black Cottonwood

Populus trichocarpa

A large hardwood 100 to 200 feet tall found on moist sites along streams. Common uses: paperpulp, plywood cores, crates and toys.



Oregon White Oak

Quercus garryana

A hardwood 60 to 80 feet tall most commonly found in the interior valleys between the Cascades and the Coast Range. Common uses: furniture, flooring and millwork.



Other Common Plants in Oregon's Forests

These plants are common in Oregon's second-growth forests.

Sword fern

Polystichum acrostichum

Sword fern grows in wet shade forests. Its fronds grow from a central point and can be up to five feet long. Separate a frond's rachis and, to ward the stem, you should find a little "rib" on each one. In the West, sword fern fronds grow as trees and spread much of the earth.



Old man's beard

Epipactis atrorubra

This gray-green herb is commonly found growing on the banks of hanging streams. Its branches resemble a straggly beard. When pulled gently, each stem breaks very easily, and it comes off in thin pieces, and is eaten by deer and elk in the winter, with the potential of such damage to the other plants.

Lupine

Lupinus

Lupines grow in clumps and start lying up to three feet tall. Their many small flowers range from blue and purple to white with pink, and on the east side of the Cascades lupines are related to peas and their flowers are similar to pea flowers.



Pearly everlasting

Anemone multifida

Several thin white flowers cluster on each stem of this plant, and they are very dry. Only open to show to the center. The everlasting does not last long to see and it grows in woods, fields, meadows, and other open areas.



Kinnikinnick

Empetrum nigrum

Kinnikinnick was a traditional word used by native tribes and was applied to this plant by traders who, in the west, its scientific name means "grove of berries," and bears down on the bright red berries. Kinnikinnick may be the a popular ground cover in Oregon, this and suburbs.



Poison oak

Rhus toxicaria

In Oregon you are likely to find poison oak in low elevations on the west side of the Cascades, especially in the Columbia gorge. As you look can grow scrubby or vine-like. Watch out for three leaflets with wavy edges. The center leaflet is significantly longer than the other two leaflets; they are more lobed on their outer edge than on their inner edge, the edge toward the center midrib. The "mark" in this plant's name comes from its resemblance to oak leaves; the "poison" comes from the allergic reaction most people develop on coming in contact with it. Stay away!



Cascade Oregon grape

Mahoea aquifolium

Especially common west of the Cascades, Oregon grape is an evergreen with leaves that resemble holly. The name says it better: the name refers to the veins in its leaves. Its "leaves" are really young ones which were used by early settlers to make jelly and wine.



Huckleberry

Vaccinium

More than a dozen species of huckleberry can be found in Oregon. Their berries ranging in color from blue-black, though blue to red. Huckleberry wine is a delicacy, but is certainly less popular than the fruit. The leaves bear a resemblance to holly and newer Oregonians.



Bitterbrush

Quercus dumosa

As in a fast grassland, bitterbrush is found in open areas east of the Cascades and can be confused with sagebrush, but the edges of sagebrush leaves do not fold inward. Bitterbrush leaves are favored by elk and deer.





OREGON FOREST
RESOURCES INSTITUTE

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PHOTOGRAPHY

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Don Getty: Red-tailed hawk, great horned owl

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Adam Summers: Northern alligator lizard

Jim Swingle: Red tree vole

Bureau of Land Management Image Library: Pacific chorus (tree) frog, western bluebird, black-tailed deer

U.S. Fish and Wildlife Service Image Library: Steller's jay, spotted owl, American black bear

Coffee Creek Watershed Preserve: Sharp-shinned hawk

Northwest Habitat Institute (NHI): Vaux's swift

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Wayne Aldridge: Page 4



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