

PILEATED WOODPECKER

Dryocopus pileatus



The deep, rectangular holes in this cedar tree were made by the powerful, crow-sized pileated woodpecker, which may be the largest woodpecker in North America. (The Ivory-billed Woodpecker is larger, but is thought to be extinct, although there have been sightings in 2004 & 2005). Pileated Woodpeckers are able to penetrate the sound, hard outer sapwood of live trees, even Douglas Firs, to reach the decayed heartwood where they find and feed on carpenter ants. They also eat other insects which they find in snags and logs. Fruits and berries are seasonal additions to their diet. Pileated Woodpeckers are mostly clack but have red crowns on their heads and black and white markings on their necks and faces. They range over very large home territories, as much as 1,000 acres per pair. Although

you are unlikely to see them because of their range, their high-pitched, loud, and wild-sounding, laughing call can often be heard from the old-growth forest of the park.

17 LICORICE FERN

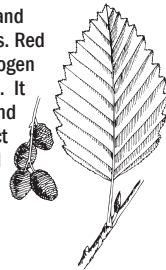
Polypodium glycyrrhiza
Fern Family

This fern is often mistaken for the sword fern, but two features can be quickly double checked. First, the leaflets of the licorice fern attach along their base directly to the stem. Second, the licorice fern usually is fond of growing out of logs or high in trees on the moss and bark. In addition, the leaflets of licorice ferns are wavy. The root of this fern have been a favorite of many for the licorice flavor.



18 RED ALDER
Alnus rubra
Birch Family

Red Alder is a pioneer species; it rapidly colonizes new forest openings and is often found on stream banks cleared by flooding or on new islands in streams. It is a tree that attains moderate size and age, growing about 100 feet tall and living about 100 years. Red Alder has the rare ability to fix or capture atmospheric nitrogen and store it in its roots, thus enriching the forest soils. It provides habitat for many other species, such as lichens and numerous insects. The insects that feed on the leaves attract chickadees, warbling vireos, and flycatchers. When a Red Alder dies, it becomes the preferred habitat for one of our most delectable mushrooms, the Oyster Mushroom (*Pleurotus ostreatus*). The Red part of its name comes from the sap, which is a bright orange-red color.



For more information about this and other Clackamas County Parks:

Phone: 503-742-4414

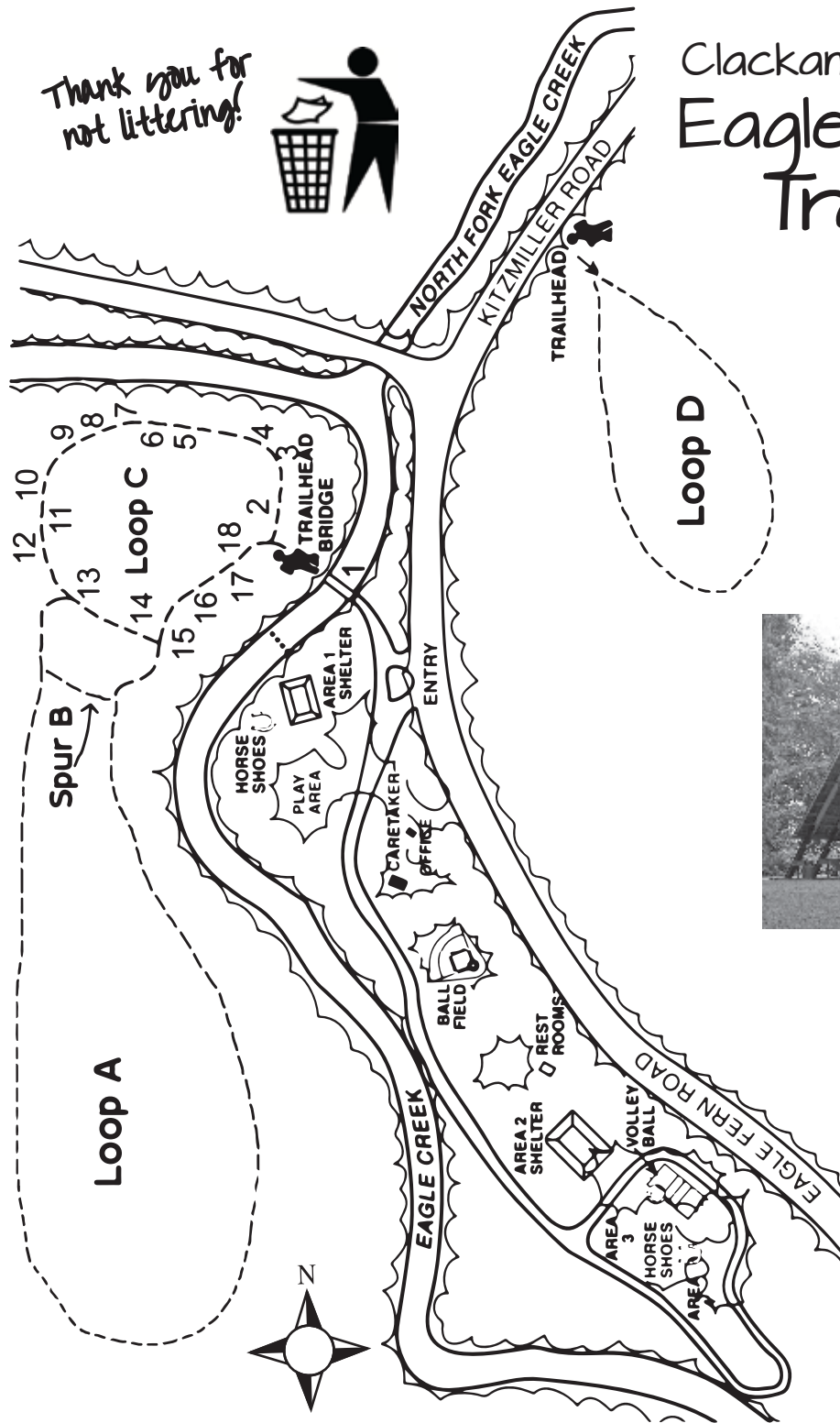
Email: parkreservations@clackamas.us

Web site: www.clackamas.us/parks

Online Reservations:

<http://reservations.clackamas.us>

Thank you for not littering!



Clackamas County Parks Eagle Fern Park Trail Guide

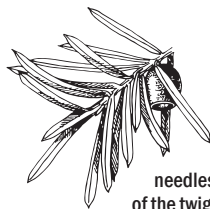
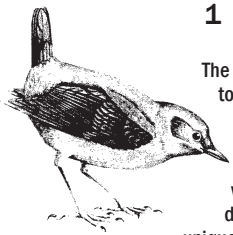


-----	Park Trails		
Trail Loop A:	1.22 miles	Identified Plant &	
Trail Loop B:	.09 mile	Animal Life	
Trail Loop C:	.35 mile		
Trail Loop D:	.53 mile		
		1-18	

1 AMERICAN DIPPER

Cinclus mexicanus

The footbridge is an excellent place to observe the dipper, a small gray bird that is often seen on rocks in the stream and near its edge. Stop and watch the dipper and discover for yourself its unique lifestyle. Dippers hunt in shallow water for aquatic insects and small fish. They also dive under water, even in rapids, to pursue their prey. Their feet are not webbed, but they can "fly" under water, using their wings as fins. They nest behind waterfalls and stream-side tree roots or under bridges. They will fly up and down the river, but never into the forest. They have a beautiful song and they sing all year.



5 PACIFIC YEW

Taxus bravifolia
Yew Family

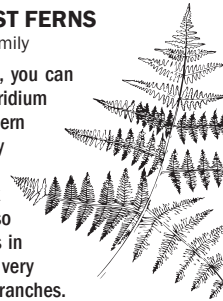
This is a small tree which tends to grow in the shade of larger trees and is, more often than not, far from other yews. The leaves are needles which come out singly on two sides of the twig giving it a flat spray. The needles are about four-fifths of an inch long and are distinguished from grand fir and western hemlock in that the Pacific Yew needles have points on the tips. Although it is classified as a coniferous tree, it has a reddish, fleshy fruit that looks like a huckleberry. The leaves and the fruit are poisonous.

6 MORE FOREST FERNS

Common Fern Family

In addition to the Sword Fern, you can see Bracken Ferns (*Pteridium Aquilinum*) and Lady Fern (*Athyrium filix-femina*). Lady Fern is very delicate, light green, and its fronds die back in the fall. Bracken Fern also dies back each fall, but grows in the form of a small tree with a very tough stem and strong side branches.

Bracken Fern can grow eight feet tall and form dense "forests." Willow Flycatchers, a small migrant bird of forest openings, often builds its nest on the "limbs" of the Bracken Fern carefully attaching the nest to the "trunk" with grass.



2 SWORD FERN

Polystichum munitum
Common Fern Family

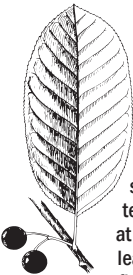
This is the familiar dark green fern of the forest, especially coniferous forests. It is evergreen and as its name says, is sword-shaped. Its frond may grow up to four feet long. It forms rather dense clumps. The leaflets attach to the stem by stalks (petioles). Leaves are divided once.



3 CASCARA BUCKTHORN

Rhamnus purshiana
Buckthorn Family

Lacking large teeth and lobes, the leaves of the cascara are basically oblong and are about three inches in length. The deep venation makes cascara leaves somewhat similar to alders, but the absence of large teeth distinguish them. The buds occur singly at the tips of the twigs and are circled by leaves. The small cluster of greenish-yellow flowers bloom in May and are followed by cherry-like fruits which turn blue-black in color. Cascara bark contains a drug that acts as a laxative, and this made the harvesting of cascara bark an important business in Oregon. Cascara grows in moist, shady areas. It is often with maples and red alders and can grow twenty to forty feet tall.



4 SALMONBERRY

Rubus Spectabilis
Rose Family

This raspberry grows into a tall shrub with prickles only on the lower stems. The leaflets have three lobes. The flowers are a purple to magenta color and about four-fifths of an inch across. The fruits are yellow to red-colored berries. These berries are edible, but not considered very tasty. The shoots are eaten by Native Americans. This shrub is most often found in moist woodland area. Blooming period is from April to August.



7 DEAD TREES (SNAGS)



Often referred to as snags, dead trees play many ecological roles in the forest. Soon after a tree dies, it is discovered by bark beetles which lay their eggs in it. The beetle larvae burrow in the hard, nutrient rich outer layer of the wood and create openings for other insects and fungi. Fungi contribute to the decay of the tree and prepare it for use by carpenter ants. The ants do not eat the wood, but excavate extensive systems of runways and nests inside the tree. Smaller woodpeckers feed on the shallow feeding bark beetles in the snag, while the larger woodpeckers, like the Pileated Woodpecker, excavate larger openings to feed on the carpenter ants. Woodpeckers also excavate nest cavities in the snags that are later used by nesting animals, like small birds, chipmunks and squirrels.

8 LOGS

Like standing dead trees (snags), logs also play important ecological roles in the ecosystem. Some animals, like the Oregon Slender Salamander and the Red-Backed Vole, are more abundant in habitats with many large logs. Salamanders require a constantly moist environment and large logs soak up and retain moisture even through the driest months of summer and fall. The pencil-thin salamanders are able to burrow through the...



LOGS (continued)

...decayed wood in older logs where they feed upon insects and other invertebrates. Red-Backed Voles often feed on underground mushrooms called truffles. The voles disperse the spores (seeds) of the fungi that produce the truffles. The fungi often live in symbiotic relationships (mutually beneficial) with tree roots, providing the tree with elaborate extension of its root system and helping the tree gather nutrients and moisture. The tree produces sugars by photosynthesis in the needles and then feeds these sugars to the fungi. So the logs provide needed habitat for voles which plant the fungi that help trees grow which eventually fall die, thereby continuing the cyclical relationship.

9 WESTERN RED CEDAR

Thuja plicata
Cypress Family

This evergreen tree has flat sprays of scale-like leaves with cones that are turned up and bend back. It is said that the cones, before opening, look like a smoker's pipe. Red Cedars grow generally in moist places, singly or in clusters. The bark has long, stringy trips and the trunk can become broad.



10 WESTERN HEMLOCK

Tsuga heterophylla
Pine Family

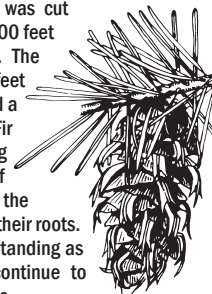


The needles of the Western Hemlock are two sizes. The shorter needles come out of the top of the twig and the longer needles come out of the sides of the twig. The needles are very flat and rounded at the tips. The needles are deep green while the underside are paler. The needles actually connect to the twig by woody projections on the twig, making the twig itself more visible that it is on fir trees. Old twigs have woody "stubble" where the needles have fallen. The tree can be recognized at a distance by its bowed top branch. The cones, which hang downwards, are about an inch long.

11 OLD-GROWTH DOUGLAS FIR

Pseudotsuga menziesii
Pine Family

Douglas Fir is the Oregon State Tree. Although a pioneer species that does not tolerate much shade, Douglas Fir can live for many centuries and become an old-growth or ancient forest tree. The oldest Douglas Fir was in Washington State and was estimated to be about 1,400 years old when it was cut down. They commonly grow to over 200 feet tall and can have enormous girth. The tallest known Douglas Fir was 330 feet and the one with the largest girth had a circumference of 48 feet. Douglas Fir comb moisture from the air, extracting moisture from fog. Thousands of species of plants and animals live in the crown, on & in their bark and among their roots. After they die, whether they remain standing as snags, or as downed logs, they continue to support numerous plants and animals.



12 BIG LEAF MAPLE

Acer macrophyllum
Maple Family



Unlike the evergreen coniferous that dominate the old-growth forest here at Eagle Fern Park, the Big Leaf Maple is a deciduous tree that loses its leaves in the fall. Yet, in an interesting way, Big Leaf Maples are evergreen too. That is because they support an extensive growth of epiphytes on their trunks and limbs.

Epiphytes are plants that grow on other plants, but are not parasites. The mosses, lichens and ferns growing on the maples do not obtain any nourishment from the maple tree. The Big Leaves of the maple tree can grow up to 24 inches across. And yes, their sap can produce maple syrup, but of a lower quality than of the sugar maples.

13 RED HUCKLEBERRY

Vaccinium parvifolium
Heath Family

The "wiry" looking stems of this shrub in winter, without leaves, are bright green and appear twisted. With oval-shaped thin leaves, which are between two-fifths and four-fifths of an inch and arranged in an obvious alternative sequence, this shrub is easy to recognize. The small greenish flowers with pink tinges hang and are usually overlooked. The red berries are only about three-tenths of an inch long, but are tasty. The shrub usually grows between three and six feet tall, and is almost always found in coniferous forests.



14 OREGON OXALIS

Oxalis oregana
Oxalis Family



Also called sour grass or redwood sorrel, the leaves of this herb strongly resemble those of clover. The three leaflets are far more delicate and tasty (but should be eaten in moderation). The flowers are solitary, pink, upright and have five petals. The plant grows between two and twelve inches tall. It is found in most coniferous forest. A smaller member of this genus with yellow flowers is often found as a garden weed. Its blooming period is May through June.

15 VINE MAPLE

Acer circinatum
Maple Family

This shrubby tree rarely grows taller than 25 feet high. The leaves usually have five to eight lobes and are toothed. The typical leaf measures two to four inches long. The fruits are said to look like canoes and twirl (like helicopters) as they fall. It is the leaves of this tree which have the brilliant scarlet color in the fall. The little reddish flowers are rarely observed by most people since they bloom in the early spring, before the leaves are completely developed.

