

A watercolor illustration of various plants and leaves. In the top left, there is a large green leaf with a brown, textured seed pod. To its right, a branch with several green, elongated leaves and a small orange flower with pink stamens is shown. In the bottom left, a pink flower with a yellow center is visible. The bottom center features a large, bright yellow-green leaf. In the bottom right, there are reddish-brown, winged seed pods. The background is a light, textured wash of colors.

Plants at Lewis
Creek Park

Introduction / Acknowledgements

About this book: This book was made by Emi Lutz as part of her senior project at International School in Bellevue. Emi learned about native plants through classes and independent research, and then spent 2 months taking photos, making illustrations, writing text, and putting this book together. There is a half page front and back for each plant. Identification information is on the front page, and the back page contains a fun fact. For native plants, the back page also has an ethnobotany section, which describes how Native Americans used the plant.

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All other photos, as well as all text, illustrations, and cover: by Emi Lutz

Nomenclature: follows Hitchcock and Cronquist (excluding pages 49, 51, 69)

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Note about edible plants: Although some species are described as edible in this plant guide, there are many poisonous plants, and it can sometimes be difficult to correctly identify a plant. One should always check with an expert before ingesting any parts of any plant.

Answers to game on page 4:

Tall Oregon Grape: C E J, Salmonberry: B H K, Beaked Hazelnut: D F L, Yellow Cedar: A G I



City of Bellevue

Parks & Community Services Department - Natural Resources Division

Environmental Stewardship Opportunities - Senior Culminating Project 2012

Table of Contents

Glossary.....2

Games.....3

Trees

Western Hemlock.....5

Douglas-fir.....7

Western Red Cedar.....9

Yellow Cedar.....11

Western White Pine.....13

Red Alder.....15

Paper Birch.....17

Black Cottonwood.....19

Quaking Aspen.....21

Lombardy Poplar.....23

European Mountain Ash.....25

Bigleaf Maple.....27

Shrubs

Vine Maple.....29

Indian Plum.....31

Beaked Hazelnut.....33

Willow.....35

Salmonberry.....37

Red Huckleberry.....39

Twinberry.....41

Snowberry.....43

Deadly Nightshade.....45

Salal.....47

Dull Oregon Grape.....49

Tall Oregon Grape.....51

Baldhip Rose.....53

Devil's Club.....55

Ferns

Sword Fern.....57

Licorice Fern.....59

Lady Fern.....61

Bracken Fern.....63

Aquatics

Common Water Starwort.....65

Cattail.....67

Sedges

Tule Reed.....69

Slough Sedge.....71

Grasses

Reed Canary Grass.....73

Other

Creeping Buttercup.....75

False Lily of the Valley.....77

Western Trillium.....79

Common Horsetail.....81

Glossary

Achene: A small, dry fruit with a single seed.

Bract: A reduced leaf-like structure at the base of a flower or inflorescence.

Catkin: A dense cluster of flowers that have scaly bracts.

Coniferous: Bearing cones.

Deciduous: A plant whose leaves fall off. (Not evergreen).

Ethnobotany: How Native Americans used the plant.

Evergreen: A plant whose leaves stay green year-round. (Not deciduous).

Fronde: A large divided leaf. (The term is mostly used to describe ferns).

Habitat: Where something (in this case, a plant) can grow.

Inflorescence: The flowering part of a plant.

Invasive plant: A non-native plant that has spread to the point of disrupting the ecosystem.

Leader: A tree or branch's terminal shoot.

Margin: The edge of a leaf blade.

Native plant: A plant that has been living somewhere for 1000s of years, and is an original part of that ecosystem.

Non-native plant: A plant that has been introduced by humans to a new place where it was not found before.

Nurse log: A decomposing fallen tree trunk that provides moisture and nutrients for new plants.

Panicle: A branched, clustered inflorescence with flowers maturing from the bottom up.

Perennial: A plant that lives 3 or more years.

Petiole: A leaf stalk

Pitch: The resin of a plant.

Riparian: Near rivers or other bodies of water.

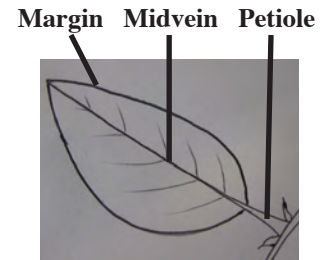
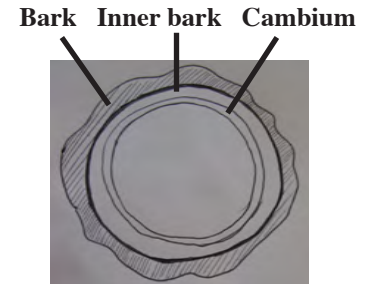
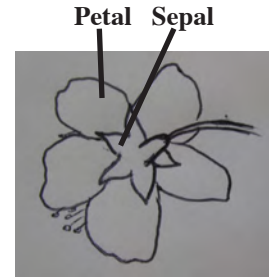
Rhizome: A horizontal underground stem that sends roots and shoots from its nodes.

Sap: The juices / fluids that circulate through a plant.

Sori: A cluster of sporangia (spore-bearing sacs) on a fern leaf.

Stigma: The part of the female flower that is receptive to pollen.

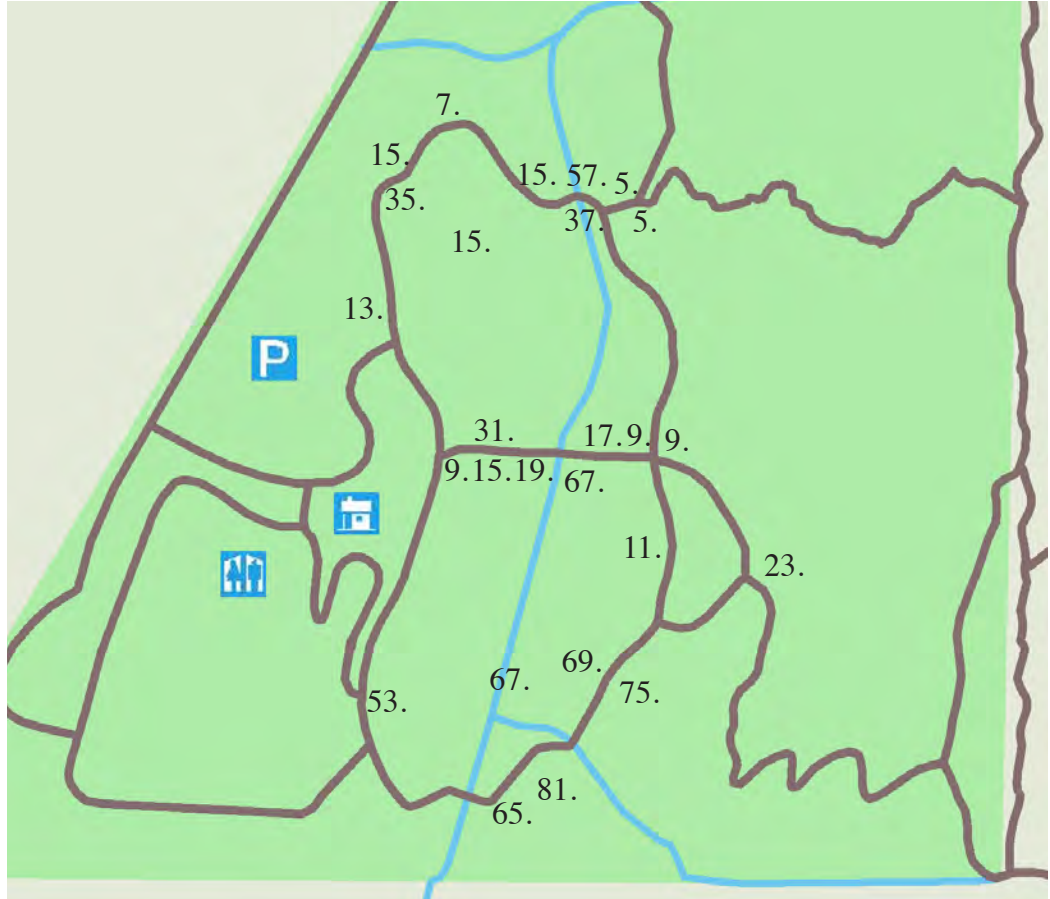
Transpiration: Emitting water vapor from the leaves.



Games for Kids

Instructions: Look at the 0.5-mile loop on this map of Lewis Creek Park, and try to find at least 5 of the plants that are marked on the map! The number at the plant's location corresponds with the page number of the plant in this book. Then, go to the plant's page and share the fun fact with a friend or parent.

Good luck!



Games for Kids

Instructions: There are 3 photos of each plant. Can you match what images go with what plant name? (If you want hints, use the table of contents to look up these 4 plants in this book). Answers are on the back of the cover.

Tall Oregon Grape

A.



E.



I.



Salmonberry

B.



F.



J.



Beaked Hazelnut

C.



G.



K.



Yellow Cedar

D.



H.



L.





General: Western hemlock grows up to 200 feet tall and is shade tolerant. The leader is very droopy. This tree, along with douglas-fir and Western red cedar (following pages), are the dominant trees in the forests West of the Cascades.



Bark: Bark is reddish brown, rough, scaly, and furrowed. The slender twigs are rough from the needles falling off. The parasitic plant dwarf mistletoe can grow on Western hemlock, which causes the branches to swell or grow abnormally.



Needles: The needles are yellowish green to blue green on the top, while the bottom is whitish with 2 lines on them. They are short (0.25~0.75 inches) and unequal in length. They are feathery, delicate, flat, and irregularly spaced.



Cones: The oblong seed cones are purplish green when young, and turn light brown. They are less than 1 inch long.

Western Hemlock

Tsuga heterophylla

Fun Fact: The Western hemlock is Washington's state tree. It is the world's largest hemlock (although it looks small compared to the gigantic Douglas-firs).



Ethnobotany: Tribes in Washington used Western hemlock to tan hides and to make fish traps and fish nets. This tree also served as firewood, and preparing different parts of the tree with different ingredients made dye that was red, brown, or yellow-orange. Hunter camouflage and temporary huts and shelters were made from the boughs. Twigs were laid in the rivers to collect herring eggs. In Washington, Western hemlock was used medicinally to treat tuberculosis, hemorrhages, and sores. A poultice of chewed leaves treated burns, and the pitch prevented chapping and sunburns. Native Americans outside Washington sometimes used Western hemlock's inner bark or cambium as a winter survival food.



General: Douglas-firs can be up to 300 feet tall, or sometimes even taller. They tend to look like telephone poles because of their tall and straight trunks. This tree can be more than 1000 years old.



Bark: Bark is dark brown, rigid, grooved, and rough. It is very thick, allowing it to survive moderate forest fires. The branches are spreading to drooping, and the tree lacks low branches. There is a stiffly erect leader.



Needles: Needles are yellowish-green, 1 inch long, and spirally arranged. They have pointed tips. There is 1 groove on the upper surface, and 2 white bands on the lower surface. When they fall off, they leave small flat scars on the twigs.



Cones: The tree's seed cones are 2~4 inch long hanging ovals with papery scales that have 3-forked bracts extending beyond the scales. The pollen cones are small and reddish brown.

Douglas-fir *Pseudotsuga menziesii*

Fun Fact: A Native American story explains the 3-forked bracts of the seed cones as mice who hid inside the scales of the douglas-fir cones during a great forest fire. The 3 bracts represent the hind legs and tail that stuck out.



Ethnobotany: Douglas-fir is great firewood, and Native Americans usually used the bark as fuel because it was easier to gather. The Green River Group (from South Seattle), as well as many other Washington tribes, used douglas-fir to make salmon spears and harpoons. The Swinomish tribe (from the Northwest coast of Washington) boiled the bark to make a light brown dye in order to make their fishnets invisible to the fish. The pitch was chewed as gum, and various Washington tribes used this tree to treat colds, chest aches, and sores.



General: This tree grows up to around 200 feet tall, and is shade-tolerant. It grows in moist to wet soils, as well as drier habitats.



Bark: Bark is gray to reddish brown and tears off in long fibrous strips. The leader and branches tend to droop, looking like waves. The aromatic wood splits easily and is rot-resistant, so it was used very extensively by Native Americans.



Needles: Needles are yellowish-green, but turn brown and shed when they are 3~4 years old. They are glossy, scale-like and give a sweet fruity scent when crushed. The scales overlap and look like flattened braids.



Cones: Seed cones are green when young, and turn brown and woody. They are around 0.5 inches long, turned upwards, egg-shaped and have 8~12 scales. Pollen cones are reddish, and very small.

Western Red Cedar *Thuja Plicata*

Fun Fact: This tree was considered very powerful, and some Native American tribes honored it with the name “tree of life” because it provided fuel, tools, shelter, clothing, transportation, and medicine.



Ethnobotany: In addition to the uses in the drawing, the wood was made into barbecue racks and sticks, arrow and harpoon shafts, spear poles, dancing platforms, mortuary poles, coffins, combs, cradles, benches, roof boards and house planks. It was crafted into ceremonial whistles, rattles, horns, and trumpets. The inner bark was used for mats, sponges, blankets, sacks, napkins, thread, mask decoration, fishing line and canoe sails. Shredded bark was used for cradle padding, towels, paintbrushes, and bandages. The strong limbs were made into rope for whale hunting and anchor lines. The bark was used for roofs, temporary shelters, leggings for snow, containers, and cooking tools. Different parts of the tree were used to make clothing and accessories, as well as baskets, which were water tight if made from the roots. Native Americans also prepared this tree in different ways to treat colds, coughs, fevers, sore lungs and backs, swollen necks, stomach pains, sties, toothaches, tuberculosis, bronchitis, heart trouble, skin irritations, carbuncles, sores, and leprosy.



General: This tree, also called Alaska cedar, grows up to 150 feet tall, and can be over 1000 years old. Unlike Western red cedar, stroking the branchlets away from the tip is prickly, not smooth. The trunk is slightly twisted, and the leader droops.



Bark: Bark is dirty white to grayish brown. The flattened branches tend to hang vertically. Unlike Western red cedar, the vertical strips of the bark do not tear off in long strips, and the inner bark is yellowish and smells like raw potatoes.



Needles: Needles are bluish-green, scale-like, and have sharp-pointed spreading tips. It can be distinguished from Western red cedar because the crushed leaves smell like mildew instead of smelling pleasant.



Cones: Seed cones (left) start as round light green berry-looking cones that are less than 0.5 inches long, and covered with a white waxy powder. These cones ripen into a brownish scaled cone. Pollen cones are tiny (about 0.2 inches).

Yellow Cedar *Chamaecyparis nootkatensis*

Fun Fact: A story from the Snoqualamie tribe (central Washington) says that the cedar, pine, fir and spruce used to only grow in Sky Land, where Moon was the chief. But a blue jay and a fox secretly entered Sky Land using Moon's rope that connected Sky and Earth. There, the fox found Moon's beaver traps, so he turned into a beaver and went in a trap. Moon skinned the "beaver", but the fox later came back to life and used his spirit power to make the 4 trees small in order to bring them to Earth. On his way down, the fox was still a "beaver" so he gnawed Moon's rope to weaken it. The angry Moon tried to follow the blue jay and fox, but he was too heavy for the gnawed and weakened rope, so he fell down and became Mount Si. The fox and the blue jay planted the 4 trees all over the mountain, and now the Cascade Mountains all have these evergreens.



Ethnobotany: In Washington, Native Americans sometimes used yellow cedar wood to make canoes and paddles. Elsewhere, the wood was also used for construction, digging sticks, chests, dishes, totem poles, masks, bows, and headdresses. The inner bark was crafted into baskets, cordage, masks, mats, blankets, and clothes. Native Americans prepared the tree in different ways to treat kidney ailments, insanity, rheumatism, arthritis, and sores.



General: This pine grows up to 130 feet tall and is named after the light color of the wood. This tree would be more abundant, if not for a fungus called white pine blister rust, which makes the branches swell and blister with orange pustules.



Needles: Needles are light bluish-green, and 2~5 inches long. They grow in bundles of 5 (more clearly picture on the next page).



Bark: Bark is dark grayish black. It starts out smooth, but becomes scaly. The trunk is tall and straight. The tree is tall and dense, so it is prone to blowing over.



Cones: The seed cones (left) are 4~10 inches long and cylindrical. When they are young, they are purplish greenish yellow, and they mature to a reddish-brown woody cone. The yellow pollen cones are 0.5 inches long.

Western White Pine

Pinus monticola

Fun Fact: West of the Cascades, more than half of the Western white pine population has died due to a fungus called blister rust, which was unintentionally introduced from Europe.



Ethnobotany: Tribes in Washington used the tree's pitch as gum, cough medicine, and a treatment for stomach aches and sores. Native Americans drank tea from the bark to purify blood, and to treat stomach disorders, tuberculosis, and rheumatism. Some tribes outside of Washington used the pitch as a waterproofing and cleansing agent, and to fasten arrowheads onto shafts. The bark was made into baskets, small canoes, and small totem poles. Some of these tribes also ate the cones and inner bark.



General: Red alder is a deciduous tree that grows up to 80 feet tall. It is aggressive and grows quickly, but tends to only live up to 50 years old. They improve the soil where they grow by enriching it with nitrogen.



Leaves: Leaves stay green almost until they fall off in late autumn. The top is dull green and smooth, while the bottom is paler and hairy. The margins are wavy, and the edges roll under slightly. These elliptic leaves have a sharp point at the base and tip.



Bark: The bark is gray, thin, and smooth. It looks spotty because this tree has prominent lenticels (which are raised pores that allow the tree to exchange gas with the atmosphere). The wood and inner bark turn rusty red if they are cut or damaged.



Flowers/Fruit: The catkins appear before the leaves come out in the spring, and are up to 4.5 inches long. Unlike most deciduous trees, red alder bears cones as fruits. These cones are brown, grow in clusters, and remain on the tree over the winter.

Red Alder *Alnus rubra*

Fun Fact: The Nitinaht tribe (from Vancouver Island) decided whether water was good to drink or not by checking if alder grew on the banks of the creek.



Ethnobotany: Red alder bark contains salicin, which metabolizes into salicylic acid in the body. Today, this acid is used in aspirin and acne medication. Native Americans also recognized the medicinal value of salicylic acid, so they used the bark to treat poison oak, insect bites, tuberculosis, colds, sores, skin irritations, stomach problems, and lung problems. The Cowlitz tribe (from South Central Washington) also rubbed rotten red alder wood on the body to remedy aching bones. In addition to medicinal uses, Native Americans in Washington crafted the wood into dishes, bowls, platters, spoons, baby cradles, canoe paddles, and firewood. Native Americans also said red alder provides the best wood for smoking fish and meat.



General: Paper birch grows up to 70 feet tall. The wood is light, hard and strong. This plant readily sprouts from cut stumps. Paper birch is also called canoe birch.



Bark: The bark is creamy white to copper brown, smooth, and shining. It peels in thin papery strips, and is marked with brown horizontal lines of raised pores. However, the bark near the ground can be brown or black, and furrowed. The inner bark is orange.



Leaves: The deciduous leaves are bright green at first, turn dull dark green on top and pale on the bottom, and then turn yellow in autumn. They are 2~3 inch long heart-shaped ovals with a sharply pointed tip. The margins are toothed and the midvein is slender.

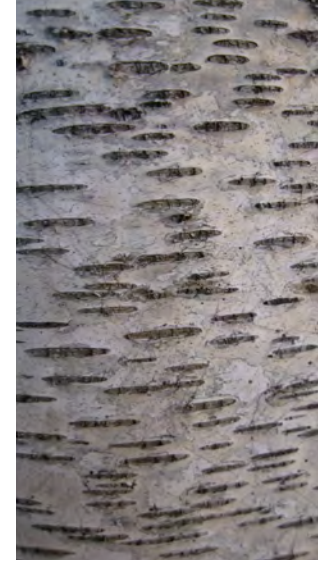


Flowers/Fruit: Paper birch flowers are brownish catkins that are 3~4 inches long, and appear in April before the leaves come out. The fruits are tiny winged nutlets that mature in autumn.

Paper Birch

Betula papyrifera

Fun Fact: Currently in this area, the non-native European white birch tends to grow wild, while the native paper birch is usually planted. The European trees have more elegant and dainty leaves, while the native trees have smoother prettier bark.



Ethnobotany: Native Americans in the Northwest did not depend on this tree, relying instead on Western red cedar. However, further inland where Western red cedar does not grow, paper birch was used extensively. The bark can be peeled into large, flexible, durable, waterproof sheets, and was made into canoes, baskets, containers, cups, pails, roofs, cradles, bathtubs, cloaks, umbrellas, dye, and paper. The wood was used for fuel, canoe paddles, sleds, snowshoes, and tepee frames. These inland Native Americans also used this tree for various medicines, and the sap and inner bark for emergency food.



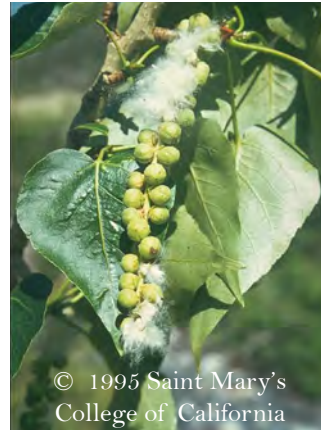
General: Black cottonwood grows up to 160 feet tall, and lives up to be 250 years old. They are generally found near streams and in wetlands. The buds are sticky and fragrant.



Bark: The bark is rough. Young bark is light green, and older bark is dark gray with deep furrows.



Leaves: The bases of the leaves are heart-shaped or round, and the tips are pointed sharply. The margin is finely toothed. It is dark green on top and whitish below. In early winter, the deciduous leaves turn gold and fall off. They are about 5 inches long.



Flowers/Fruit: Male catkins are 4~5 inches long and come out in March and April to release pollen. Female catkins come out in May and June to release seeds that are covered in white cotton-like fluff. Male and female catkins grow on separate plants.

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Black Cottonwood

Populus trichocarpa

Fun Fact: Black cottonwoods have high transpiration rates and large root systems, so they can take in as much as 200 gallons of water a day! This water translocates up the tree, and then perspires out, cooling the surrounding air. If these trees weren't around, there could be more flooding!



Ethnobotany: The Chehalis tribe (from the central Washington coast) believed that black cottonwood had a life of its own because it shakes even without wind. Therefore, they never used this tree for firewood. Some tribes in Washington used black cottonwood bark as house coverings, others used the bark for dugout canoes, and others used black cottonwood to make fire drill hearth boards. Young shoots were made into sweat lodges and rope. Native Americans sometimes ate the sap, inner bark, and cambium. Black cottonwood treated cuts, wounds, tuberculosis, sore throats, and sore eyes.

Quaking Aspen

Populus tremuloides



General: Quaking aspen is a slender deciduous tree that grows up to 80 feet tall. They grow in moist, cooler areas, and are usually found in higher elevations. The tree spreads clonally.



Bark: The bark is gray or white, and turns black near the base on older trees. It is covered with rough horizontal bands. The wood is light brown and used in paper manufacture.



Leaves: The leaves are dark green above and paler beneath. They turn bright yellow in autumn. The margins are finely serrated, and the leaves are 1.5~3 inches long. Because of their long slender petioles, the leaves are almost always fluttering gently.



Flowers/Fruit: Male and female flowers grow on separate plants. The catkins appear in early spring before the leaves come out. They are dangling, limp, and 1.5~2.5 inches long. The fruit grows on 4-inch long strings that have cottony fluff.

Quaking Aspen

Populus tremuloides

Fun Fact: Quaking aspen has a wide native range, and it covers more area than any other tree in North America.



Photo by Scott Carson



Photo by Walter Siegmund

Ethnobotany: Native Americans in Washington did not use quaking aspen extensively, but elsewhere, the root, bark and leaves were prepared to treat bee stings, worms, stomach pain, heartburns, rheumatism, colds, and coughs. Powdered bark was used as deodorant. Logs were used to build lodges and to frame teepees. Native Americans also made casts for broken limbs, hats from the bark, and whistles from the branches, bark, and leaves.

Lombardy Poplar

Populus nigra var. *italica*



General: Lombardy poplar is an Italian species. These trees are tall and narrow, and can grow up to 100 feet tall. They grow well in sunny places and are also called black poplars.



Bark: Lombardy poplar bark is thick and gray-ish green. As the tree grows older, the bark becomes darker, and nears black.



Leaves: Leaves are deciduous, and turn from green to brown before falling off. The width and length are both 2~3 inches. They are diamond shaped to triangular.



Flowers: Male and female catkins grow on different trees, and are pollinated by the wind. The seed tufts are fluffy.

Photo by George Chernilevsky

Lombardy Poplar

Populus nigra var. *italica*

Fun Fact: This tree is susceptible to stem canker disease, so most lombardy poplars die when they are only 10 to 15 years old.



Lombardy poplars are not native and originate in parts of Europe, Asia, and Africa.

European Mountain Ash

Sorbus aucuparia



General: Most mountain ash trees live in sunny open forests and grow up to 20 feet tall. There are native mountain ashes (usually at higher elevations), but this non-native mountain ash is the most common in this area. Many mountain ash hybrids exist as well.



Bark: The bark is light grayish brown. Most trees have smooth bark, although the bark can become rough on older trees.



Leaves: Each leaf is 6~9 inches long, and there are 9~17 leaves on each branch. The margins are toothed, and deer eat the leaves.



Flowers/Fruit: Tiny white flowers appear in clusters in April and May. In late summer, orange to red-orange berries appear. They are less than 0.5 inches wide and very untasty, but not poisonous. This plant is widely distributed by birds, who eat the berries.

European Mountain Ash

Sorbus aucuparia

Fun Fact: Mountain ash is not really an ash species, and this plant belongs to the rose family instead.



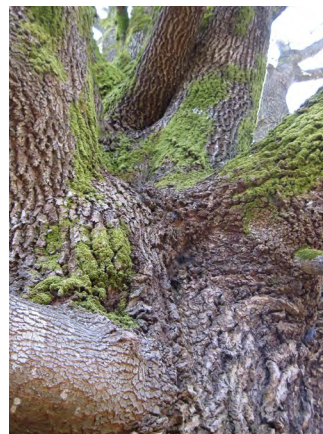
European mountain ash is not native and originates in North Europe and Asia.

Bigleaf Maple

Acer macrophyllum



General: Bigleaf maples are deciduous trees that grow up to 120 feet tall. The trunk is often covered with moss, lichen, and ferns. These trees are generally found in riparian forests. Many nurse logs in this region are fallen bigleaf maple trees.



Bark: When the tree is young, the bark is green and smooth, and when the tree becomes older, the bark turns gray, brown, and rigid. The wood is hard and lightweight.



Leaves: Leaves are 5-lobed, dark green above, and paler below. They turn yellow and brown in autumn. Leaf stalks have a milky juice that comes out when cut. Bigleaf maple leaves are the largest maple leaves, with a width of 6~12 inches.

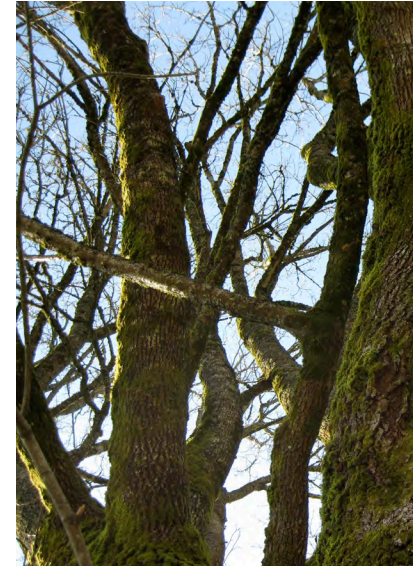


Flowers/Fruit: Flowers are greenish yellow, 0.1 inches, bloom in April, and hang in 8-inch long cylindrical clusters. Fruits are golden brown paired seeds that fall like helicopters. The 1.5~2.5 inch wings are V-shaped (unlike vine maple wings, which are straight).

Bigleaf Maple

Acer macrophyllum

Fun Fact: In this region, the tree that carries the most mosses and other plants is the bigleaf maple! This tree often grows near streams and waterfalls. Especially near waterfalls where there is a constant water spray, so much moss and fern covers the trees that it can be practically impossible to see the bark.



Ethnobotany: Native Americans in Washington used the wood to smoke salmon, and to make dishes, spoons, cradleboards, and canoe paddles. The bark was crafted into baskets and rope. Leaves were used to lay fish on while cleaning, and to cover cooking pits. The sap and cambium were sometimes eaten, and an infusion of the bark treated tuberculosis.



General: Vine maples are sometimes considered large shrubs, and sometimes considered small trees (but they are not vines). They prefer growing in wet forests.



Bark: Vine maple bark is grayish. There are multiple trunks that are 1.5 inches thick on average. The wood is dense, hard, and flexible when fresh.



Leaves: Leaves are deciduous, round, 2~5 inches wide, and have 7 to 9 lobes with toothed margins. The bottom surface can be hairy. In autumn, the leaves turn gold if the plant lives predominately in shade, and red if the plant lives mostly in sunlight.



Flowers/Fruit: Flowers are white, 0.25 inches wide, and grow in clusters. The fruits (called samaras or maple keys) are paired nutlets that contain seeds (called whirlybirds). Papery wings help the seeds spin like helicopters, and fly far away in the wind.

Vine Maple

Acer circinatum

Fun Fact: Vine maple trees bend easily, so the top of the tree occasionally grows back into the ground and sends out new roots, creating an arch.



Ethnobotany: Many tribes in Washington used vine maple to make fish traps. They also used the saplings to make salmon tongs and swings for baby cradles. Some tribes crafted vine maple into baskets or black paint, and ate the sap dried or fresh.



General: Indian plums are sometimes considered shrubs, and sometimes considered small trees. They are 5~16 feet tall, and the bark is purplish brown. This plant is also called osoberry.



Leaves: Leaves are pale green, but become yellow before dropping in late summer. They are deciduous, lance-shaped, and 2~5 inches long. The margins have no teeth.



Flowers: Flowers are greenish white, have 5 petals, and are less than 0.5 inches wide. Groups of 5 to 10 flowers grow on hanging clusters that are 2~4 inches long. They are one of the first flowers of spring, and bloom from late January to March.



Fruit: The berries change from peach colored to bluish black, and grow on red stems. They are juicy, 0.5~0.75 inches long, and come out in May or June. Indian plums are edible, but bitter, have large pits, and should not be eaten in large quantities.

Indian Plum

Oemleria cerasiformis

Fun Fact: Indian plum leaves smell like cucumbers when they are crushed.



Ethnobotany: Native American tribes in Washington ate the berries fresh, or dried them and saved them for winter. The Makah tribe (from the Olympic Peninsula) also used the bark to treat tuberculosis, and used strips of inner bark to bind harpoons.



General: Beaked hazelnut is sometimes considered a shrub, and sometimes considered a tree. They are 4~13 feet tall and have many trunks. The twigs, leaves, and buds are covered in long white hairs, especially when the plant is young.



Leaves: Leaves are 2~4 inch long ovals, with a heart-shaped bottom and a sharp pointed tip. The bottom is paler green than above, and the leaves turn yellow in autumn before dropping in October and November. They are thin and hairy.



Flowers: Male catkins are yellow, 3~5 inches long, and appear in February and March. The female catkins are tiny, with red hairs at the tip of the bud.



Fruit: The spherical nuts are enclosed in light green hairy tubular husks. They open in late summer, and grow in clusters of 2 or 3 at the end of each branch. The nuts are edible, but the husk must first be peeled like a banana, and the shell must be cracked.

Beaked Hazelnut

Corylus cornuta

Fun Fact: The Thompson tribe (from British Columbia) chewed the buds because they believed that this would help them sing well.



Ethnobotany: Native Americans ate, stored, roasted, and traded the nuts, which were picked in early autumn. The long twigs were twisted into rope. Outside Washington, where beaked hazelnut was used more extensively, the wood was made into snowshoe frames and fish net poles. Twigs were made into brooms, and the sticks and young shoots were crafted into baskets. The hair of husks was used medicinally to expel worms. Other parts of this shrub were used to close and heal cuts, and to treat sore eyes, intestinal disorders, heart troubles, rheumatism and teething children.



General: There are approximately 90 native willow species in North America, and they are very difficult to tell apart. Willows in this area are either classified as large shrubs or small trees. They grow well in wet places.



Branches: The twigs are olive green or yellowish. Unlike the weeping willows we often imagine when we think about willow trees, branches on native willow trees are straight.



Leaves: Most willow trees in Lewis Creek Park have lance-shaped leaves that are up to 6 inches long. They have very finely toothed margins. The top of the leaves (1) are bright yellowish green, while the bottom of the leaves (2) are paler.



Flowers/Fruit: Male and female flowers grow on separate plants. The catkins appear at the same time the leaves come out in the spring. They are hairy and the bracts are pale yellow. The fruits are smooth capsules around 0.25 inches wide.

Willow

Salix

Fun Fact: Willow bark contains the chemical salicin, which has pain relieving and anti-inflammatory effects. For thousands of years, people have used willow bark and leaves to relieve pain and fever, and in the 1800s, salicin was used to develop aspirin.



Ethnobotany: Willows were used medicinally to treat pain such as when the Okanagan-Colville tribe (from Northeastern Washington) used a decoction of branch tips to soak cramping feet and legs. Native Americans in Washington also crafted willow wood into bows and fire drills.



General: Salmonberry bushes can be up to 15 feet tall. They often form dense thickets and grow in moist or wet places. The twigs zigzag and are armed with prickles. The stem near the base is stout and woody, with a thin peeling golden-brown bark.



Flowers: Flowers are pink to red, 1~2 inches across, and have 5 petals. Some bloom in February, but most bloom from March to May.



Leaves: Leaves are deciduous, sharply toothed, and change from light green in spring to dark green later in the year. They are commonly in leaflets of 3, with the bottom 2 leaflets forming the shape of a butterfly.



Photo by Lindsey Koepke

Photo by Mary Stensvoid

Fruit: Berries are yellow to wine-red. They are similar to raspberries because they are edible, hollow, juicy, and seedy. However, they are mushier and not as tasty as raspberries. The berries ripen between May and June.

Salmonberry

Rubus spectabilis

Fun Fact: The Kwakiutl tribe (from Vancouver Island) applied chewed sprouts to children's heads because they thought that this would help them grow taller.



Ethnobotany: Native Americans in Washington ate the berries raw (often with salmon) or stewed. The berries are too watery to dry. The sprouts are crunchy, sweet, and juicy, and tribes like the Green River Group (from South of Seattle) cooked the sprouts and ate them with dried salmon. The stems were used to create practice bows for children. Some tribes put chewed leaves or bark on burns. Others used the pounded bark as a painkiller for festering wounds or toothaches.

Red Huckleberry

Vaccinium parvifolium



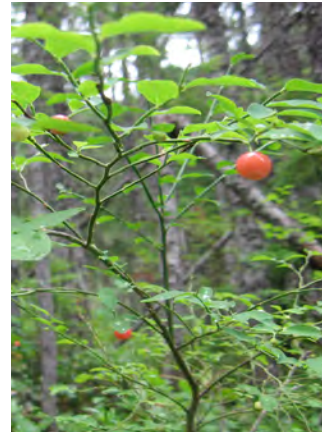
General: Red huckleberry bushes can grow up to 5 feet tall. Branches are bright green, strongly angled, wiry, and smooth. The bush often grows on cedar stumps. Some people call this plant red bilberry or red whortleberry.



Leaves: Leaves are mostly deciduous (some leaves stay year-round), and thin. They are oval, soft, and 0.25~0.75 inches long. The margin is smooth.



Flowers: Flowers range from pinkish green to greenish yellow. They are smaller than 0.25 inches across, shaped like little bells, and bloom from March to May.



Fruit: Berries are bright red, round and 0.25 inches across. They are edible, but a little tart. These fruits are on bushes from June to September.

Red Huckleberry

Vaccinium parvifolium

Fun Fact: Some Native Americans used red huckleberries as fish bait in streams.



Ethnobotany: Native Americans in Washington ate the berries fresh, dried them like raisins, froze them, or stewed them into a sauce. Berries were not picked individually, but brushed or combed off. The twigs and branches were sometimes made into brooms. Some tribes used the leaves or bark to make tea for colds, sore throats and inflamed gums. The berries' juice was also used to stimulate appetite or act as a mouthwash.

Twinberry

Lonicera involucrata



Photo by Gary Monroe

General: Twinberry is a shrub that grows up to 10 feet tall. They are erect to straggly, and thrive in wet soil. This plant is also called twinflower honeysuckle.



Leaves: Twinberry leaves are dark green, lance-shaped, pointed, and 2~6 inches long. They are often glossy and hairy below.



Photo by Walter Siegmund

Flowers: Twinberries have bright yellow flowers that grow in pairs. They are tubular, less than 1 inch long, and cupped by greenish purple bracts.



Photo by Gary Monroe

Fruit: The flowers turn into shiny black berries that also grow in pairs and are cupped by purplish maroon bracts. These berries are bitter, but they are not poisonous.

Twinberry

Lonicera involucrata

Fun Fact: The flowers attract hummingbirds and butterflies, and the berries are enjoyed by birds and bears.



Photo by J. S. Peterson



Photo by Jerry Friedman

Ethnobotany: Some Native American tribes in Washington thought the berries were poisonous, although some tribes outside Washington ate the berries. The Makah tribe (from the Olympic Peninsula) used mashed berries to treat dandruff. Other tribes on the Olympic Peninsula used the leaves to treat sores, or to serve as an emetic when poisoned. The juice from berries was used to dye baskets, or to paint faces on dolls.

Snowberry

Symphoricarpos albus



General: Snowberry bushes are 2~6 feet tall. They have very fine twigs. Some people call this plant waxberry or snowdrop berry.



Leaves: Leaves are deciduous, round to oval, and 0.75~2 inches long. The margin can be toothed, lobed, or smooth.



Photo by Walter Siegmund

Flowers: Flowers are pink to white, shaped like bells, and around 0.25 inches big. They form dense clusters of a few flowers, and bloom in June and July.



Fruit: The berry-like drops are puffy, waxy, white, 0.25~0.75 inches across, and contain 2 seeds. They grow in clusters, and can be found from early autumn through the winter. They are bland or bitter, and neither poisonous nor edible.

Snowberry

Symphoricarpos albus

Fun Fact: The Green River Group (from South of Seattle) said that snowberries were the eyes of the dog salmon, so when there were a lot of snowberries, it was a sign to expect many dog salmon.



Ethnobotany: Some Washington tribes thought these berries were poisonous, and called them “corpse berries” or “snake’s berries”. Others ate the berries as food or as an antidote for poisoning. The Chehalis tribe (from the central coast of Washington) rubbed berries on their hair as soap, and applied a poultice of the leaves to treat cuts and bruises. The juice of the ripe berries was used to treat sore eyes.

Deadly Nightshade

Atropa belladonna



General: Deadly nightshade is a widespread shrub that grows 3 to 5 feet tall. This plant is also called devil's berries, death cherries, and belladonna. All parts of deadly nightshade are extremely toxic.



Leaves: Leaves are long ovals that are 3 to 8 inches long. Eating one leaf can be fatal for adults.

Note: Woody nightshade (*solanum dulcamara*) is also poisonous. This plant has red oval berries.



Flowers: Flowers are 1~1.25 inches long, bell shaped, and greenish or dull brownish purple. They are poisonous and bloom from May.



Fruit: The berries are green at first, and shiny black when ripe. They are 0.5 inches wide. Some birds and animals eat these sweet-tasting berries, but 2~5 berries can be lethal for children, and 10~20 berries can be lethal for adults.

Deadly Nightshade

Atropa belladonna

Fun Fact: Deadly nightshade is also called “belladonna”, which means “beautiful lady” in Italian. This name comes from the historic use where women used sap from this plant as eye drops to dilate their pupils, which was considered attractive. (Belladonna is no longer used this way because the eye drops had many harmful effects such as blindness after prolonged use).



Photo by Tom Oates



Deadly nightshade is not a native plant, and it originates in South Europe, West Asia, and North Africa.



General: Salal is a creeping to erect ground cover. It is one of the most common understory shrubs in forests in this area, and they can sometimes form clumps that cover multiple acres.



Leaves: Leaves are evergreen, leathery, thick, firm, and shiny. They are ovals that are 2~4 inches long. The margin is finely toothed.



Flowers: Flowers are white or pinkish, urn-shaped, less than 0.5 inches long, and bloom from April to July. Clusters of 5 to 15 of them grow together at the ends of branches, with all of them oriented in the same direction.



Fruit: Salal has reddish blue to dark purple “berries” that are actually sepals. They are less than 0.5 inches long, edible, and out from July to December.

Salal

Gaultheria shallon

Fun Fact: You can make a little drinking cup by folding a salal leaf like a cone.



Ethnobotany: Native Americans in Washington prepared the leaves in different ways to treat burns, sores, heartburns, coughs, and tuberculosis. They ate the berries fresh, dried, in pies and jellies, or after mashing and drying them into cakes. The Makah tribe (from the Olympic Peninsula) flavored fish with the leaves.

Dull Oregon Grape

Mahonia nervosa



General: This evergreen shrub is 1~3 feet tall with yellowish bark and wood. It grows in thickets in forests, and is also called low Oregon grape, and narrow-leaf mahonia. In this area, it is more common than tall Oregon grape (next page).



Leaves: There are 9~23 leaflets on each branch. The leaves are leathery, oblong, and have spiny teeth like holly. They turn reddish or purplish in winter. Dull Oregon grape leaves (1) have 3 central veins, while tall Oregon grape leaves (2) have 1 central vein.



Flowers: Flowers are bright yellow and bloom from March to May. They smell sweet and bloom in erect clusters 4~8 inches tall.



Fruit: The berries are dark blue when ripe, powdered with white, and appear from August to December. They are 0.25~0.5 inches wide, and grow in elongated clusters. Dull Oregon grape berries are edible, but sour.

Photo by J. S. Peterson

Dull Oregon Grape

Mahonia nervosa

Fun Fact: In addition to the berries, the flowers and the early summer's tender young leaves are edible.



Ethnobotany: Many Native American tribes in Washington made tea from the roots to gargle for sore throats, and to drink for blood purification or venereal diseases. Native Americans ate the berries raw, or after preparing them into jelly, jam, or preserves. The Skagit tribe (from Northwestern Washington) also stored pulped and dried berries into cakes to eat during the winter. Most nearby tribes made yellow dye from the roots to color baskets.

Tall Oregon Grape

Mahonia aquifolium



General: This evergreen shrub is 5~15 feet tall and grows in clumps or patches. In this area, it is less common than dull Oregon grape (previous page) because it prefers drier, more open, rockier sites. It is also called holly grape, and holly-leaved mahonia.



Leaves: There are 5~13 leaflets on each branch. The leaves are oblong with prominent spiny teeth, and sometimes turn purplish in winter. Tall Oregon grape leaves (1) are glossy, while dull Oregon grape leaves (2) are dull to somewhat shiny.



Flowers: Flowers are bright yellow and bloom from February to May. They smell sweet and bloom in erect clusters 3 inches tall.



Fruit: The berries are blue, powdered with white, and appear from late June into the winter. They are 0.25~0.5 inches wide and grow in elongated clusters. Tall Oregon grape berries are edible, but bitter, and often less tasty than dull Oregon grape berries.

Photo by Meggar

Tall Oregon Grape

Mahonia aquifolium

Fun Fact: Tall Oregon grape is Oregon's state flower. (Washington's state flower is the rhododendron).



Ethnobotany: Some tribes in Washington used an infusion of the roots as a tuberculosis treatment, an eye wash, a blood purifier, or a gargle for sore throats. The Sanpoil tribe (from Northeastern Washington) used a decoction of the stem for vomiting or disturbed stomachs. Washington tribes' uses of this plant as food and dye are identical to the ethnobotany of dull Oregon grape (previous page).



General: Baldhip roses are shrubs that grow up to 8 feet tall. They can live in spots that are wet, dry, sunny, or shady. This plant is also called dwarf woodland rose and redwood rose.



Stems: Baldhip rose stems are often armed with numerous soft straight prickles, but young branches sometimes have no prickles as well.



Leaves: Leaves are deciduous, toothed, and 0.5~1.5 inches long. There are an odd number of leaves (5 to 9) on each branch.



Flowers/Fruit: The flowers are pale pink and 0.5~1.5 inches wide with 5 petals and numerous stamens. They bloom in May or June, and most branches only have one flower at the tip. The fruits are orange to scarlet, and 0.25~0.5 inch pear-shaped “hips”.

Baldhip Rose

Rosa gymnocarpa

Fun Fact: This plant is named baldhip rose because unlike most roses, the crown of sepals falls from the fruit early, leaving the end of the fruit (also called the “hip”) bald.



Ethnobotany: The Okanagan-Colville tribe (from Northeastern Washington) used a decoction of the leaves and branches as a hair and body wash. A poultice of chewed leaves treated bee stings. Leaves were placed under and over cooking food for flavor and to prevent burning. Native Americans made tea from boiling the branches, twigs, or young leaves. This tea was said to protect Native Americans from bad spirits and ghosts, and it was also used to soak fishing lines and nets for good luck. The hips were sometimes a famine food, or eaten sparingly when ripe. However, Native Americans only ate the outer rind of the fruit, because the seeds contain hairs that are irritating to the digestive tract. Children also played with the hips as beads.



General: This is a spiny shrub that grows up to 13 feet tall. They grow in thickets in moist forests. The stems tend to be thick, not branched, and covered with large yellowish spines that are almost 0.5 inches long. The wood has a sweet smell.



Leaves: Leaves can be more than 1 foot wide. They are shaped like maple leaves, with 7 to 9 sharply pointed lobes with toothed margins. The undersides of the leaves are covered with spines.



Flowers: Flowers are greenish white, small, and grow in pyramidal upright clusters that are 4~12 inches tall. They bloom from late April to June.



Fruit: The flowers turn into pyramidal clusters of bright red shiny berries in late summer. Berries are not edible by humans, but bears love them.

Devil's Club

Oplopanax horridum

Fun Fact: This plant's scientific name really describes the plant. "Oplo" means to work and "panax" refers to a panacea, which is a remedy for difficulties and diseases. Devil's club is called this because it is one of our most medicinally useful native plants. "Horridum" means horrible, referring to the plant's terrible spines.



Photo by Walter Siegmund

Ethnobotany: Native Americans used devil's club root bark to treat adult-onset diabetes. The root bark also contains the chemical oplopanoe, which makes it an effective medicine for respiratory tract infections such as coughs, colds, and chest pains. It contains chemicals with anti-inflammatory properties as well, so Native Americans used the root bark to treat rheumatism and arthritis. The Green River group (from South of Seattle) used dried bark as deodorant. Some Washington tribes made reddish brown or black face paint by burning the sticks and mixing it with grease. The wood is light colored and lightweight, so many Washington tribes made fish lures or fishing hooks from it.



General: This is a large evergreen fern. The stipes are dry and scaly. The fronds are lance-shaped, up to 5 inches long, and erect or arching.



Habitat: Sword ferns are the most abundant and widespread fern in the Seattle area. They dominate shady areas, and are often one of the main evergreen groundcovers of forests.



Leaflets: Leaflets are dark green. They are pointed with sharp teeth. At the bottom of each leaflet, near the stalk, there is a small lobe that points towards the tip of the frond.



Sori: The sori are brownish orange and round. They are two rows on the back of each leaflet: one row on each side of the mid-vein. In late summer or early fall, the released ripe spores make the air dry and dusty.

Sword Fern

Polystichum munitum

Fun Fact: Native Americans sometimes called this the “pala pala plant” because of a traditional endurance game where children tried to pull off as many leaflets of a leaf in one breath, while saying “pala” with each leaflet.



Ethnobotany: Fronds were used as flooring, bedding, mattresses, placemats at feasts, and hula-hula skirts for dance costumes. They acted as a protective layer for food in storage boxes, pit ovens, baskets, and on berry drying racks (because berries don't stick to them). Native Americans sometimes prepared and ate the roots and rhizomes. The spore sacs or chewed leaves were applied to burns and boils. Sores were washed with an infusion of stems or boiled rhizomes. The raw plant was chewed and eaten to treat sore throats and tonsillitis.



General: This is an evergreen fern with straw-colored stipes, and fronds that vary in length from 3~24 inches.



Habitat: Licorice fern often grows on the trunks and branches of deciduous trees, most commonly on mossy bigleaf maple trees. It can also grow on rocks, logs, and wet mossy ground.



Leaflets: The leaflets are green, smooth, and tend to be more than 1 inch long. They have pointed tips and margins with small teeth.



Sori: The sori are yellowish orange and are oval to round. There are two rows on the back of each leaflet: one row on each side of the mid-vein.

Licorice Fern

Polypodium glycyrrhiza

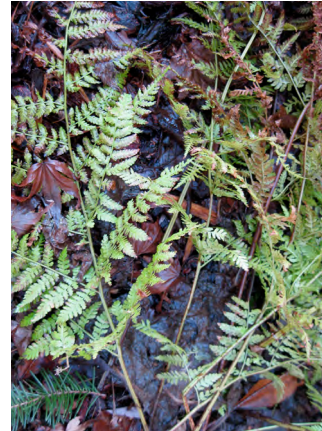
Fun Fact: The rhizomes taste like licorice, and are much sweeter than table sugar if properly harvested, cleaned, and dried. However, they can be bitter and unpleasant if they are moist and fresh.



Ethnobotany: The rhizomes were sometimes chewed for flavor, eaten, or mixed with distasteful medicines as a sweetener. Rhizomes were used medicinally as well – Some Native Americans chewed them, swallowed the juice, or ate the roasted and peeled rhizomes in order to treat colds, coughs, sore throats, shortness of breath, and chest pain.



General: Lady ferns are deciduous and turn brownish yellow in late fall. They grow up to 3 feet tall. The fronds are clustered.



Edibility and Habitat: Lady ferns are poisonous when raw. They are common in mucky wet soil, and grow well in both shade and sun.



Leaflets: The leaflets are light green, tender, and 3~7 inches long. There are 20~ 40 pairs of leaflets on each frond. The blades are diamond shaped. They are frilly with toothed or lobed segments.



Sori: The sori are curved, and oval to horseshoe shaped. There are several pairs of sori on both sides of each central vein.

Lady Fern

Athyrium filix-femina

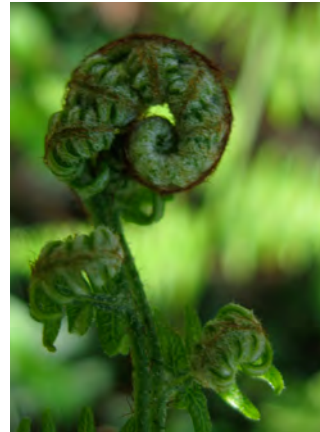
Fun Fact: It is easy to remember that these ferns are called “lady”. The blades are diamond shaped, and there is a common saying that “diamonds are a girl’s best friend”. This fern is also frilly.



Ethnobotany: The Cowlitz tribe (from Southern central Washington) drank tea from boiled rhizomes to ease body pains. Native Americans in Washington ate different parts of this plant – some ate the bulbs on the roots, others ate new shoots, some ate the fiddleheads in early spring, and others ate the center of rhizomes after roasting and peeling them. (However, as a note, lady ferns are poisonous when raw). The leaves were used to wipe fish, and to cover food, such as berries that were set out to dry.



General: Bracken ferns are the most common and widespread fern in the world. They are deciduous. Most ferns grow in clumps, but this fern's rootstock branches extensively underground, so the fronds shoot up sporadically.



Edibility: Some Native Americans ate this fern, but no part of this plant should be eaten because it contains a carcinogenic enzyme. Studies suggest a correlation between eating this fern and higher rates of stomach cancer. This plant can also poison livestock.



Leaflets: The fronds are triangular, hairy, can be longer than 9 inches, and have 10 or more pairs of leaflets. The margins are rolled under and round or toothed. In the winter, the leaflets turn brown.



Sori: The sori grow on the edge of the leaves, but are covered by the leaf's rolled margin.

Bracken Fern

Pteridium aquilinum

Fun Fact: Bracken fern rhizomes grow deep, so this fern can survive intense fires, and they are often plentiful after fires. The Quileute tribe (from the Olympic Peninsula) took advantage of this. They burnt areas in order to lure deer and elk to come graze on the young fern shoots.



Ethnobotany: Almost all of the Native American tribes in Washington ate the center of rhizomes after roasting them in ashes and peeling them. (However, this plant is harmful and should not be eaten). The fronds were also used to cover berry baskets, wipe fish, and to act as a protective layer in pit ovens. Bracken fern grows over a wide range, and many Native Americans outside Washington used it as well, with the most common purposes being medicine, food, baskets, and bedding.

Common Water Starwort

Callitriche stagnalis



General: Common water starwort is a small aquatic perennial. It is also called pond water starwort. The roots are fibrous.



Habitat: This plant is not native, although native water starworts exist as well. It grows in shallow water or mud, and some people put this plant in their fish tanks.



Leaves: Water starwort stems grow to the surface, where there are floating mats of leaves. These leaves are less than 0.5 inches wide, round and notched at the tip. Common water starwort can have submerged leaves as well, which are narrower.

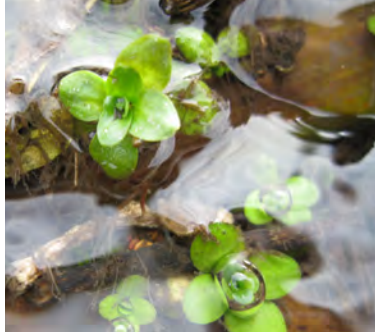


Flowers: Common water starwort flowers are white, and do not have sepals or petals. They are very tiny so they tend to go unnoticed.

Common Water Starwort

Callitriche stagnalis

Fun Fact: This plant is small but still plays an important role in our ecosystem. Ducks, other waterfowl, and fish eat this aquatic plant, and common water starwort also provides habitat for fish and invertebrates.



Common water starwort is not native and originates in Europe and North Africa.



General: This is a perennial aquatic that grows in marshes. The stems are unbranched, cylindrical, pithy, and up to 10 feet tall. Many marsh animals and birds depend on it for habitat and food.



Leaves: Leaves are grayish green, 0.75 inches wide, flat, long, slender, and somewhat spongy. They appear in April, turn yellow in October, and turn brown and die in November.



Flowers: There are many tiny flowers on a cylindrical spike. On the lower half, there are the female flowers, which turn from dark brown to fluffy before dispersing. On the upper half, there are the male flowers, which disperse and leave the stem tip bare.



Fruit: The fruits are tiny nutlets less than 0.05 inches long. They are meant to float in water or wind, and have slender hairs at the base.

Cattail

Typha latifolia

Fun Fact: Cattail pollen easily burns and bursts, so it is sometimes used to make fireworks.



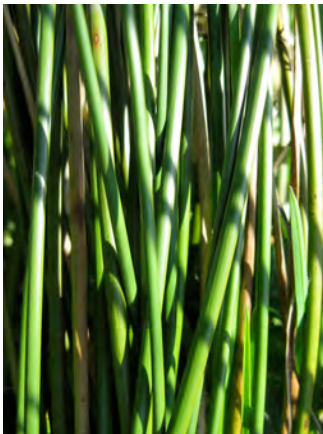
Ethnobotany: Many Washington tribes used cattails to make mats for raincoats, capes, kneeling pads in canoes, mattresses, hangings, screens, and coverings. Cattails were often crafted into lightweight baskets. Some tribes used cattails to make large packsacks, or insulation for winter homes. Native Americans outside Washington used this plant extensively too; mainly for mats and medicine. The seed fluff could be collected to dress wounds, and to stuff pillows and mattresses. Native Americans also prepared and ate the roots, rhizomes, shoots, stem bases, inner stalks, seeds, fruiting heads, green flower spikes and pollen.



General: This sedge is erect and 3~9 feet tall. Stems are often leafless, but when there are leaves, they are 2~24 inches long, 0.5 inches wide, dark green, and grow from near the base of the stems.



Habitat: Tule reed grows well in marshes, muddy shores, and shallow water.



Stems: Stems appear in the spring and die in the winter. They are dark green, smooth, triangular or round, pithy, and flexible. Tule reed has 2 subspecies: hard-stemmed bulrush, and soft-stemmed bulrush (whose stems are softer and more crushable).



Inflorescences: The inflorescences are spikelets that are reddish brown to gray. They are 0.25~0.5 inches long, and appear in clusters near the tips of the stems.

Tule Reed

Scirpus lacustris

Fun Fact: One tule reed does not look very strong, but people can put thousands of them together to make sturdy reed boats.



Ethnobotany: Stems were harvested in late summer or early autumn, dried, and made into baskets and mats. The mats were used for rugs, floors, temporary walls and roofs, meat platters, cradle linings, sleeping mats, and covers for doors, walls, and seats. The Clallam tribe (from the Olympic Peninsula) used tule reed to suck out the cause of an illness. Native Americans also ate the sweet bulbs, inner parts of the stems, roots, leaves, seeds, and the lower tender parts of the plant in the spring.

Slough Sedge

Carex obnupta



General: Slough sedge is shade tolerant and thrives in wet rich soils. They are evergreen, and the majority of slough sedges grow by lakes or ponds. This plant is one of the more common sedges in the Pacific Northwest.



Leaves: The top of the leaves (1) are shiny and dark blue-green, while the bottom of the leaves (2) are dull and pale blue-green. There is a crease down the middle, making the cross-sections V-shaped (3). They are 0.25~0.5 inches wide, and razor-edged.



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Stems: Stems are purplish, thick, and triangular. They are coarse, stiff, and around 2 feet tall. Slough sedge flowers grow on these stems.



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Flowers: Slough sedges have floral clusters that are 2~4 inches long and bloom in April and May. On each cluster, there are 4~9 black narrow floral spikes. The spikes on the upper half are male and the spikes on the lower half are female.

Slough Sedge

Carex obnupta

Fun Fact: Slough sedges are an important resource for animals. Birds eat the seeds, muskrats eat the roots, and moose mothers eat sedges so that they have enough sodium when calving. Waterfowl and small animals find shelter or make nests amongst the leaves of dense clusters. In the winter, slough sedges are often submerged, so amphibians lay their eggs on the stems. When the amphibians hatch, this sedge gives the babies more protection from predators.



Ethnobotany: Men from the Hesquiat tribe (from Vancouver Island) shaved with the sharp edges of the leaves. The Thompson tribe (from Southern British Columbia) rubbed slough sedges to soften them, and then used this plant on the inside of moccasins. Native Americans in the area also wove the leaves to make baskets and hats.



General: Reed canary grass thrives in wet areas, especially disturbed sites. It is a colonial perennial that spreads with a creeping rootstock. This grass is common all over Northern North America and Eurasia, and it is also called reedgrass.



Leaves: The leaves are bluish green most of the year, and turn straw-colored in the winter. The leaf blades are slightly hairy, flat and firm. They are 0.5 inches wide, and can be more than 1 foot long.



Stems: Reed canary grass has hollow stems that are 3~8 feet tall. The flowers grow at the tips of these stems.

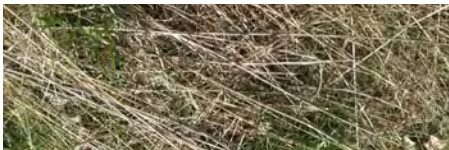


Flowers: In June and July, reed canary grass has 5~8 inch long clusters of panicles. These panicles are pale green or tinged purple, and turn light brown later in the year. They open when blooming, and contract when the seed is ripening.

Reed Canary Grass

Phalaris arundinacea

Fun Fact: Reed canary grass is native East of the Cascade Mountains, but now it has spread so much and is so troublesome that Washington state classifies it as an official noxious weed, even though it is native to some parts of the state.



Ethnobotany: The Okanagan-Colville tribe (from Northeastern Washington) made reed canary grass into fishing weirs, eating mats, and mats to use when drying roots and berries. Native Americans from the Salish tribe (from Vancouver Island) used the stems to decorate baskets.

Creeping Buttercup

Ranunculus repens



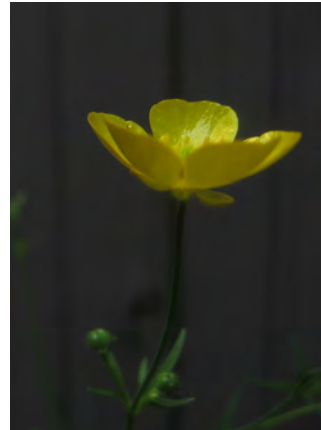
General: Creeping buttercup is a hairy fuzzy evergreen perennial. This weed likes moist sites and can grow up to 20 inches tall. Deer, some birds, and moth larvae eat this plant.



Skin Irritation: This plant can cause skin irritation and blistering, or inflammation of the mouth, throat, and digestive tract tissue when swallowed. If large quantities are eaten, creeping buttercup is toxic and harmful to livestock.



Leaves: Leaves are dark green, often with pale blotches. There are 3 leaflets, and they are fuzzy, triangular, lobed, and toothed.



Flowers/Fruit: Flowers are shiny yellow and 0.75~1.5 inches wide. They bloom from April to August at the tip of the erect stems or branches. The fruits are smooth achenes that grow in clusters.

Creeping Buttercup

Ranunculus repens

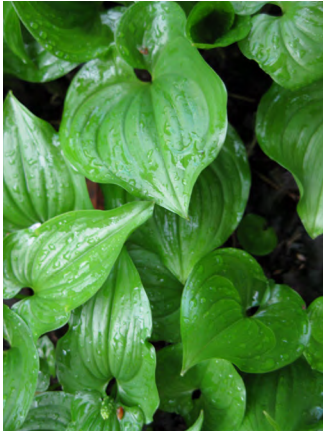
Fun Fact: The genus is “ranunculus” (which is Latin for “little frog”) because this plant thrives in wet places.



Creeping buttercup is not native and originates in Europe, Northwest Africa, and Asia.

False Lily of the Valley

Maianthemum dilatatum



General: This low, spreading groundcover is a perennial that is common in swamps and moist shady forests. In drier forests, it grows in spring and early summer before entering dormancy. It is also called beadruby, may lily and deerberry.



Leaves: The leaves are 2~5 inches wide and heart-shaped. Different from other plants with heart-shaped leaves, plants in the lily family have parallel veins. There are 2 or 3 leaves on each flower stem.



Flowers: Flowers are tiny and white, and bloom from late April to June. They appear in clusters at the tips of the stems, which are 5~10 inches tall.



Fruit: False lily of the valley has edible brownish red berries that are 0.25 inches wide. However, lily of the valley is a toxic plant with poisonous berries that look similar to false lily of the valley berries.

False Lily of the Valley

Maianthemum dilatatum

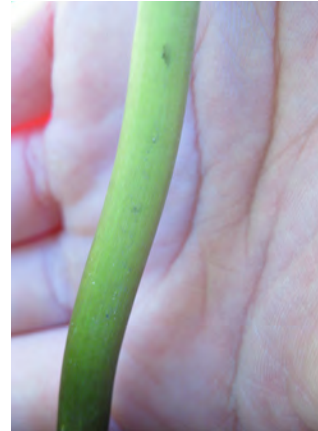
Fun Fact: False lily of the valley is a popular groundcover because it thrives in shady areas, but gardeners should be careful before planting it because the plant's creeping rhizomes make it easy for this lily to spread and crowd other plants.



Ethnobotany: The Quinault tribe (from the Olympic Peninsula) used a poultice of pounded roots to wash sore eyes. A few tribes in Washington sometimes ate the berries, but the berries were not always plentiful, so they did not serve as an important part of Native American food supplies.



General: This native perennial lily grows well in moist forests. Western trilliums are edible, but they are not tasty, and they are so pretty that most people do not eat it. Other common names include large white trillium, pacific trillium, and coast trillium.



Stems: This plant has stems that are 6~24 inches tall. It can grow as a single plant, or in patches of 50 or more.



Leaves: “Trillium” means “in threes” in Latin. This plant’s leaves (as well as the petals, sepals and stigmas) grow in threes. Each leaf is triangular to oval, broad, and 2~6 inches long.

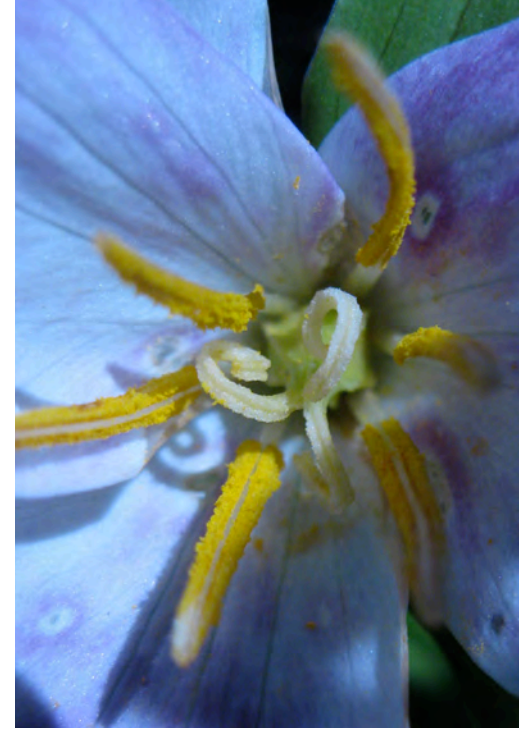


Flowers: The 3 white petals turn pink-purplish with age. There are 3 green sepals beneath the flowers. Blossoms can be up to 4 inches wide. The flowers bloom from March to May, just when robins are appearing, so this plant is also called “wakerobin”.

Western Trillium

Trillium ovatum

Fun Fact: This lily disperses its seeds in an interesting way. Each seed has small oil-rich appendages that are attractive to ants. The ants carry the seeds to their nests, where they eat the appendages or feed them to their larvae. Then, the ants discard what remains (the seed) in their rubbish piles, and a new Western trillium can grow.



Ethnobotany: Many tribes in Washington used this plant to treat sore eyes, and made eye drops from powdered roots, or from the juice of smashed plants. The Makah tribe (from the Olympic Peninsula) also used a poultice of pounded bulbs as a love medicine.

Common Horsetail

Equisetum arvense



General: Horsetails grow almost anywhere in the Northern Hemisphere, especially in moist to wet soils. It is native, but often considered a weed (and is very hard to remove). This plant is also called field horsetail, Chinese puzzle, and snakegrass.



Fun Fact: One ton of horsetails can accumulate 4.5 ounces of gold in its cells. However, this gold cannot be harvested in a profitable manner. Horsetail is also rich in silica, which makes the plant rough, and keeps herbivores of all types from eating the plant.



Fertile Shoots: Horsetails have two types of shoots; fertile and sterile. Fertile shoots are pinkish beige, and grow up to 1 foot tall.



Sterile Shoots: Horsetail shoots come out between February and May. Sterile shoots are green and turn silver gray when they die in the winter. They are hollow and grow up to 3 feet tall. The stems are ringed with many dry, skinny, wiry branches.

Common Horsetail

Equisetum arvense

Fun Fact: Common horsetail has grown on Earth for over 200 million years (so they were around even before dinosaurs).



Ethnobotany: Native Americans in Washington ate the sprouts, young shoots, and bulbs. However, other horsetails (that can look similar to this horsetail) are toxic. The Cowlitz tribe (from South Central Washington) mashed the cone-like top and mixed it with salmon eggs to eat. Swimmers of the Quileute tribe (from the Olympic Peninsula) sometimes rubbed themselves with horsetail in order to feel strong. Tribes outside of Washington used common horsetail medicinally to wash areas affected by poison ivy, and to treat aches, pains, teething babies, cuts, sores, rheumatism, and kidney ailments.