

Common Seattle Trees

that may qualify for specific protection measures

Trees are valued in Seattle and legally protected in a variety of ways. If you are considering cutting, removing or preserving trees during construction activity on a site, become familiar with Seattle's tree protection regulations. This brochure describes a selection of the most common trees that may qualify as "exceptional trees" and require protection measures under Seattle Municipal Code (SMC) Chapter 25.11: Tree Protection. The threshold diameters indicated in this brochure refer to the diameter of tree, by specific species. Tree diameters are measured at a height of 4.5 feet above the ground. For a complete list of trees qualifying as exceptional, as well as standards and procedures for their classification, consult Director's Rule (DR) 16-2008. An excellent source for tree characteristics and identification is the Oregon State University website "Landscape Plants: Images, Identification and Information" <http://oregonstate.edu/dept/ldplants/3plants.htm#picoc>.

Individuals considering removing or cutting trees on their property should also consult Tip 242, Tree Protection Regulations in Seattle, which provides an overview of tree protection regulations available on DPD's website at www.seattle.gov/dpd/. Special restrictions apply to environmentally critical areas; see Tips 331, 331A and 331B. General tree protection information for during construction can be found in this free downloadable pamphlet "Tree Protection on Construction and Development Sites, A Best Management Practices Guidebook for the Pacific Northwest" http://www.seattle.gov/dpd/cs/groups/pan/@pan/documents/web_informational/p2209364.pdf.

Thanks to the City of Bellevue's Parks and Community Services Department for the use of their publication Trees of Bellevue.

MAPLE FAMILY

Acer species

Threshold: 2'1"

General

Three common maples found in Seattle are shown on this page. Two are native species and are described below. The following applies to all maples.

Deciduous trees or shrubs

Form

Deciduous - Opposite - Simple

Leaves

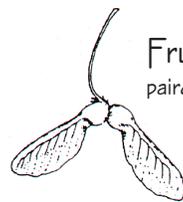
Palmate leaves always opposite on the branch; lobed to various degrees

Flower

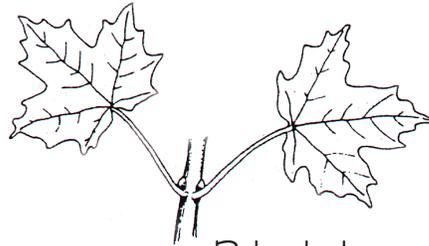
Always paired, winged seeds; called 'helicopters' by children for the way each half of the pair spins to the ground when dropped

Fruit

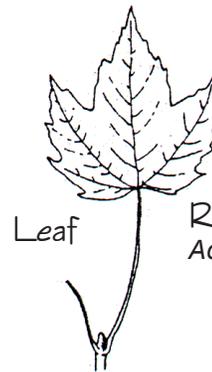
Small and non-showy, usually in clusters: dark red (Japanese and Red) or yellow-green (Norway)



Fruit
paired, winged seeds



Palmate Leaves
opposite branching



Red Maple
Acer rubrum



Form

BIGLEAF MAPLE

Acer macrophyllum

Threshold: 2' 6"

Form

30-100 feet; can have several main trunks; massive, spreading crown

Leaves

Deciduous - Opposite - Simple Palmate; 3-5 deep lobes; enormous; 8-14" in length and width

Bark

Green when young; dark gray-brown, deeply furrowed, with mosses and ferns growing abundantly when older

Flower

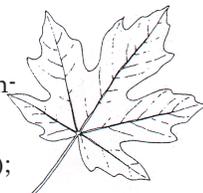
Greenish-yellow and tiny (1/4"); hanging in elongated clusters

Fruit

Pairs of winged seeds; coarsely hairy at acute angled juncture

Tree Tip

Produces 'canopy roots' which harvest nutrients from the moss and debris which collect in the branches. Native.



Leaf



Form

VINE MAPLE

Acer circinatum

Threshold: 8"

Form

Up to 30 feet; spreading, multi-stemmed shrub

Leaves

Deciduous - Opposite - Simple Palmate; 7-9 pointed lobes; serrated edges; a little larger than your palm: 4 3/4" in length and width

Bark

Gray-brown; smooth

Flower

Small and white (1/4"); maroon sepals underneath; hanging in clusters

Fruit

Pairs of smooth winged seeds joined at an obtuse angle; to 1 1/4" long

Tree Tip

Called circinatum to indicate the circles formed when tall branches bend to the ground and sprout roots.



Leaf



Form

LONDON PLANE TREE *Platanus x acerifolia*

Threshold: 2' 6"

Form 70-100 feet; straight clear trunk; pyramidal crown becomes very large, open and wide spreading at maturity

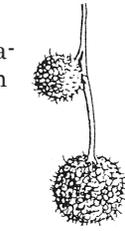
Leaves Deciduous - Alternate - Simple Palmate; 3-5 shallow lobes; leaf edge coarsely toothed; to 10" wide and 8" long; dark green above, pale beneath

Bark Mottled gray, olive green, and cream; flaking off in plates

Flower Tiny; grouped separately in small round clusters; males yellow, females reddish

Fruit Globed shaped multiple fruit; usually 2 per stalk

Tree Tip Can be confused at first with maples, or sweet gum. Also known as Sycamore.



fruit



Form

PACIFIC DOGWOOD *Cornus Nuttallii*

Threshold: 6"

Form 10-40 feet; small trees or shrubs; branches often appearing to grow in horizontal layers

Leaves Deciduous - Opposite - Simple Leaves oval with acutely pointed tips; veins parallel and curving to follow the smooth leaf edge

Bark Smooth except at base

Flower True flowers tiny, greenish yellow, and in clusters surrounded by 4-6 white to pale pink petal-like bracts

Fruit Bright red oval fruits (3/8" long) in dense clusters



Flower



Form

PAPER BIRCH *Betula papyrifera*

Threshold: 1' 8"

WHITE BIRCH *Betula pendula*

Threshold: 2'

Form 40-60 feet (European White Birch) or up to 80 feet (Paper Birch); can have several trunks; crown open and rounded

Leaves Deciduous - Alternate - Simple Pointed with round base; doubly serrate edge; 2-3" long (Paper) or 1-2" (Euro.)

Bark White; easily peeling in papery strips (Paper) or cracking to show dark furrows between white ridges (Euro.)

Flower Tiny flowers in two kinds of catkins: catkin green and shorter; yellow, longer

Fruit Fat green catkins of tiny winged nuts

Tree Tip The native species in this pair, Paper Birch, was used in baskets and canoes.



Leaf



Form

AMERICAN SWEETGUM *Luquidambar styraciflua*

Threshold: 2' 3"

Form 60-75 feet; clear, straight trunk; crown pyramidal early in life, rounded later

Leaves Deciduous - Alternate - Simple Star-shaped; 5-7 pointed, deep lobes; edges finely serrated; 4-6" in length and width

Bark Gray-brown; thick; deeply furrowed with rounded ridges

Flower Yellow-green; tiny; in clusters

Fruit Prickly sphere the size of a cherry tomato (1-1 1/2" in diameter); one per stalk; composed of many beaked, seedbearing capsules

Tree Tip Seen along many of Seattle's streets. Do not confuse with London Plane Tree.



Fruit



Form

OAKS *Quercus*

- Form
- Leaves
- Bark
- Flower
- Fruit
- Tree Tip

Trees and shrubs of a wide variety. The family is divided into 2 groups: red oaks and white oaks. Forms can be similar or different depending on age.

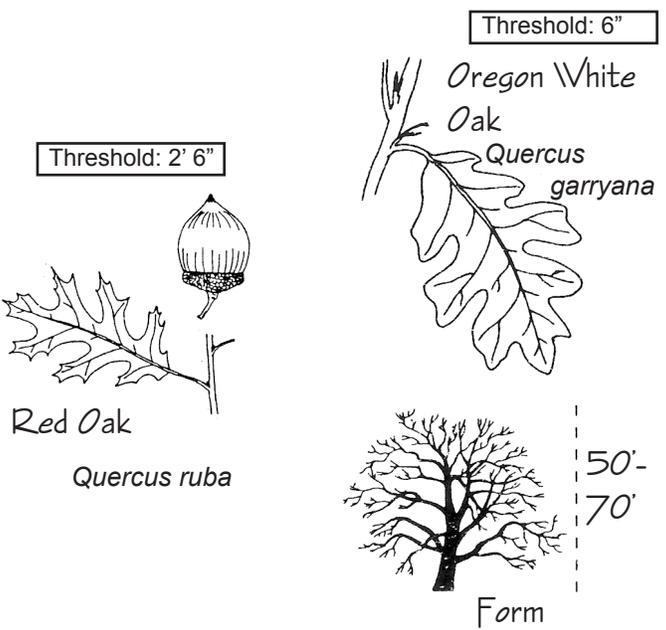
Deciduous - Alternate - Simple
 Red oaks: pointed bristle-tipped lobes; White oaks: rounded lobes

Dark gray-brown; furrowed or scaly

Tiny, yellow; occurring in short, catkinlike clusters

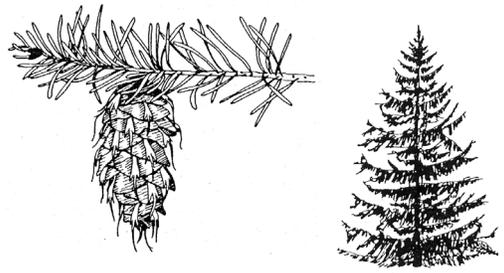
Acorn; inside of shell hairy (Red Oaks) or not hairy (White Oaks)

Though oaks are deciduous, the leaves stay on the branches through winter and give trees a dead appearance.



CONIFERS

The conifers are set apart from the broadleaves by having a different kind of seed. Conifers get their name because for most species, their seeds are found in cones. There are a few species whose cones look more like fruits, however. Most conifers keep their needle-like leaves year-round, though there are few which drop them each fall.



DOUGLAS FIR *Pseudotsuga menziesii*

- Form
- Leaves
- Bark
- Cone
- Tree Tip

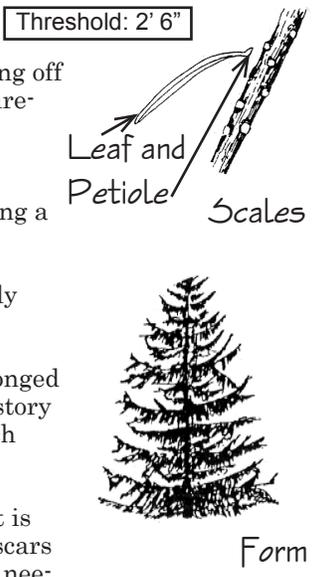
100-250 feet; older branches breaking off to leave lower trunk clear; open, spire-like crown

Evergreen - Single Needles
 1 1/4" flat needles; pointed tip; having a petiole

Dark brown-almost purplish; heavily furrowed

Distinctive pendant cone with 3-pronged bracts (mouse tails and feet as the story goes) extending out underneath each scale; 4" long

Very common native. You can tell it is not a true fir because of the raised scars left on the twigs, the petioles of the needles, and the pendant cones.



DEODAR CEDAR *Cedrus deodara*

Threshold: 2' 6"

- Form
- Leaves
- Bark
- Cone
- Tree Tip

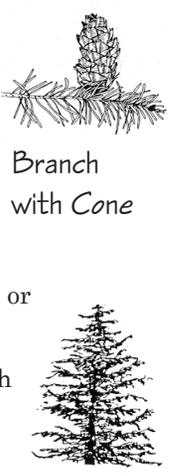
40-70+ feet; broadly pyramidal, spreading and flat-topped with age; graceful pendulous branches

Evergreen - Bundled Needles in whorls of 15-20; 1-2" long; widely spaced on branches

Dark brown to gray; tightly scaled and fissured

Upright 3-5" barrel shaped; solitary or in pairs;

Develops large lateral branches with widely spaced needle clusters that create an open airy profile; a true cedar from the Himalayas of India.



WESTERN RED CEDAR *Thuja plicata*

Threshold: 2' 6"

- Form
- Leaves
- Bark
- Cone
- Tree Tip

150-200 feet; broadly pyramidal; trunk buttressed at base; lower branches drooping and J-shaped

Evergreen - Scales
 Foliage in flat sprays "fronds"; leaves are tiny scales 1/4" long; overlapping to make a braided pattern

Silvery gray outer bark; reddish inner bark; very fibrous

Egg-shaped and woody; having 10 scales; sitting upright on twig; 1/2" long

Another very important Northwest native. The bark and wood are fragrant and rot-resistant; the bark can be made into rope; the wood is both a traditional and modern building material.



WESTERN HEMLOCK *Tsuga heterophylla*

Threshold: 2' 0"

- Form** 125-175 feet; pyramidal with a conspicuously drooping top; sweeping, feathery, branches to ground when open-grown
- Leaves** Evergreen - Single Needles
Needles are different lengths; extending horizontally from twig
- Bark** Gray-brown and scaly
- Cone** Diminutive cones for such a big tree; 3/4" in length; always pendant
- Tree Tip** Hemlocks are an important native species which indicate a healthy, mature forest. The scientific name is fitting: *Tsuga* means hemlock and *heterophylla* means "different leaves".



PINE FAMILY *Pinus species*

- Form** Conifers of various heights; branches arranged around a straight trunk like a bottle brush - "whorled branching"
- Leaves** Evergreen - Bundled Needles
Needles are bundled together in fascicles of 1-5; needle number and length are shown for 4 species commonly found in Seattle
- Cone** Cones have hard woody scales and vary in shape and size (noted at right). They are usually hanging down off the branch.
- Tree Tip** You will need to use a combination of several of the above features to make a positive identification. You can see that Scotch pine and Lodgepole Pine could easily be confused.

Western White Pine *Pinus monticola*

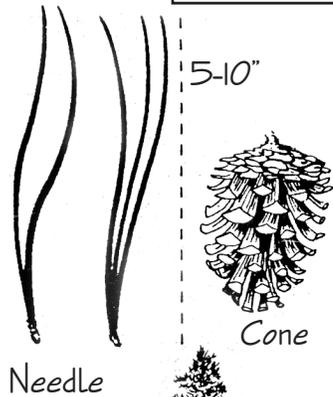
Threshold: 2'



3-5"

Ponderosa Pine *Pinus ponderosa*

Threshold: 2' 6"



5-10"

Needle

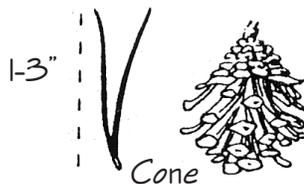
Cone

Form



Lodgepole Pine *Pinus contorta 'latifolia'*

Threshold: 6"



1-3"

Cone

Form



Shore Pine *Pinus contorta 'contorta'*

Threshold: 1'

GLOSSARY

- Alternate** leaves arranged singly along stem; not opposite
- Blade** the broad portion of a leaf
- Canopy** the uppermost layer of foliage in a forest of a single tree
- Compound leaf** a leaf composed of several leaflets; a leaf whose blade is completely divided into several leaflets
- Crown** the upper part of the tree, all of its branches and leaves together; similar to canopy
- Deciduous** leaves falling off once a year
- Drip line** the area around the base of a tree within the outside edge of the crown; also called drip zone
- Evergreen** leaves staying on year after year
- Form** height and general shape of the tree
- Fruit** the seed-bearing structure of the tree
- Leaf** identified by having a tiny bud hidden between the leaf petiole and the twig
- Leaflet** one of the small leaf-like structures in a compound leaf; distinguished from a leaf because there is no bud hidden between the leaflet petiole and the axis it is attached to
- Lobe** a shallow division in a simple leaf
- Opposite** leaves arranged in pairs along a stem so that 2 leaves are opposite each other
- Petiole** the stalk of the leaf which attaches it to the twig
- Shrub** a many-stemmed woody plant, usually less than 30 feet tall
- Simple Leaf** a leaf whose blade is whole and not completely divided into leaflets
- Tree** generally a single-stemmed woody plant growing in at least 20 feet tall at maturity