

Self-Guided Neighborhood Tree Tour

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Neighborhood: Tam O'Shanter, Northeast Bellevue

Starting point: Tam O'Shanter Park entrance on 173rd Ave NE

Summary/Theme: Ever wished to know the trees in the neighborhood a little bit more intimately than just "trees"? Look no further than your neighborhood tree tour at Tam O'Shanter park. Start on your journey to recognize deciduous, conifer, pine, cedar and quench your curiosity on lifespan and understory by taking a quick 30-minute walk in the park with a puzzling finish!



BELLEVUE NEIGHBORHOOD TREE AMBASSADOR PROGRAM



This tree tour was developed by one of Bellevue's Neighborhood Tree Ambassador volunteers. The goal of the Neighborhood Tree Ambassador program is to help build community support for trees in Bellevue.

Trees are an important part of our community because they provide significant health and environmental benefits. Trees:

- Remove pollutants from the air and water
- Reduce stress and improve focus
- Lower air temperature
- Pull greenhouse gases from the atmosphere
- Reduce flooding and erosion caused by rain

Bellevue has a goal to achieve a 40% tree canopy across the entire city. As of 2017, we are at 37%. Around two-thirds of Bellevue's existing tree canopy is in residential areas. By preserving and planting trees in residential areas, Bellevue's community members can make a big difference in helping to reach the 40% tree canopy goal.

For more information about trees in Bellevue or the Neighborhood Tree Ambassador program, please visit <u>BellevueWA.gov/trees</u>.

If you have questions or would like to share feedback about this tour, please email trees@bellevuewa.gov.



Stop #	Landmark	Discussion	Photo
1	Entrance/ Parking Lot	Begin the tour by looking around the park's tree canopy facing east. Notice that the form (shape) of trees vary when looking to the right compared to ones on the left. Form is a feature used to identify trees. Other features include bark, cones, fruit and leaves. The tree canopy may also be referred to as Overstory. Ground cover made of shrubs and ferns is referred to as Understory. Ever wondered if a forest is merely a collection of trees forming a canopy overstory? If we plant trees, does that make it a forest? Are the trees in this park planted? Facts: Deciduous trees shed their leaves, usually as an adaptation to a cold or dry/wet season. Evergreen trees do lose leaves all at once, but each tree loses its leaves gradually. Conifers are trees that bear cones with needle-like or scale-like leaves that are typically evergreen.	Form Understory



1	Entrance/ Parking Lot	Face west opposite the park and notice the grove of Red Alder , also known as Oregon Alder or Western Alder, the most abundant hardwood in the Pacific Northwest. Although lacking in any striking feature, they are ecological workhorses. They are a pioneer species helping with forest renewal and typically live 70 to 100 years.	
		They fix nitrogen into the soil through a complex root association they form with bacteria called Frankia. Native Americans have long put these trees to use in food preparation and medicine. The wood can be worked into any number of useful things like plates, bowls, utensils, furniture.	
2	Douglas Fir grove	At the south end of parking lot, there is a side entrance that will lead to a small grove of Douglas-fir to the left. Popularly used as Christmas Trees, they belong in the pine family, Pinaceae. The common name is misleading since it is not a true fir. They are an evergreen conifer native to North America and dominant in Pacific North West. They grow to a height of 40–70 feet and a spread of 12–20 feet at maturity. The largest coast Douglas-firs commonly live to be at least 500 years and sometimes exceed 1,000 years.	



Commercially valued for softwood timber used for joinery, veneer, flooring and construction due to its strength, hardness and durability. Douglas-fir also helped settle the West, providing railroad ties and telephone/ telegraph poles.

Douglas-firs were used by Native Americans for building, basketry, and medicinal purposes.

Douglas-fir seeds are used by blue grouse, songbirds, squirrels, rabbits and other small animals. Antelope, deer, elk, mountain goats and mountain sheep eat the twigs and foliage. It provides excellent cover for a wide range of animals.

It is the state tree of Oregon.

Fun fact:

When in 1925 the time came to restore the masts of "Old Ironsides," the USS Constitution, sufficiently grand White Pine trees could no longer be found. Today, Old Ironsides proudly sails in the Boston Navy Yard under the power of three Douglas-fir masts.





	Douglasfir grove understory	The understory in the grove is planted. You will see Oregon grape, an evergreen shrub with spiny foliage.	
3	Young Maple grove	Follow the trail through Douglas-fir grove walking east to a grove of young Bigleaf maple trees. They are deciduous, native hardwood species in abundance in the Pacific Northwest. The mature Bigleaf maples are further along in the tour.	



Fork before Maple grove

The trails forks near the young maple grove. At the fork to the right find the **English Holly**, also known as Common Holly or Christmas Holy. It is commonly grown as an ornamental and valued for its smooth, glossy, spiked leaves and bright red winter berries. **Berries are poisonous to humans and pets**.

It reproduces mainly by seed, but also spreads by suckering and layering. Birds eat the berries and spread the seeds to new areas. It is known to encroach extensively into native vegetation areas. In King County, English holly is classified as a Weed of Concern and its control is recommended to restore native vegetation. The City of Kirkland includes English holly on its list of prohibited plants on private property.





Fork leading to native understory.

Continue along the fork to the right until the rock. Look to the right and left and see the understory of evergreen **Western Swordfern** growing in large clumps of green fronds resembling the top of a palm tree.

Sword ferns have been around for a long time. Fossil record of fern-like plants starts almost 400 million years ago and still around today. Sword fern fronds are comprised of simple, alternate leaflets, or pinnae. Their leaflets are finely serrated and have clusters of brown spore cases, called sori, on their undersides.



Western swordfern is among the most typical and abundant understory plants in forests along the Pacific Coast. The Coast Salish people of B.C. and Washington state used the plant as a pain reliever when applied directly to the area where pain and inflammation occur.





3 Knotted Maple grove

Continue along the trail past the young maple grove to a clearing of large **Bigleaf maple** trees. It is one of the characteristic large trees in Pacific Northwest forests. It is deciduous, typically about 50 feet tall at maturity but sometimes grows more than 80 feet, making it the largest maple species in North America. Trees are generally as wide-spreading as they are tall and have known to live longer than 200 years.

As the common name claims, the leaves of this species are big, ranging from 4 to 10 inches across. Unlike Sugar Maple, they are not commonly used in Maple syrup production.





4 Playground

Continue through the clearing in front of the maples to join the gravel trail next to the playground. Facing south, see the **Giant Sequoia**, also known as Giant redwood or Sierra redwood. On maturity it can reach 250 feet tall and 30 feet in diameter. It is a fast-growing evergreen, pest-resistant, drought-tolerant species native to the Nevadas and California that can live up to 3,000 years. Some of the largest are in the Sequoia National Park in California.

The City of Bellevue is planting Giant sequoias in parks and open space throughout the community to ensure a healthy urban forest for future generations taking climate change into consideration. Over the last five years, native trees in the city – including western red cedar, western hemlock and Douglas fir – have had a higher mortality rate due to drought stress, which makes trees more vulnerable to fungal disease, insects and other pathogens.





Next to the Giant sequoia is a **Norway Spruce**, an evergreen conifer and the most common spruce in Unites States and Canada. It is a fast grower reaching 100 to 200 feet and has the largest cones measuring 3.5 to 7 inches.

It does not drop its needles and keeps them on for up to 10 years. Its branches extend to the ground, giving excellent wind protection.

It is a native of Europe where it grows throughout the region and is the most common evergreen in the Alps area in Europe, the Black Forest of Germany, and the Carpathian mountains of Romania, Serbia and Ukraine. In Europe it is commonly called the Mountain Spruce and can be seen growing everywhere.

It is also a popular Christmas tree and planted as windbreak.









5 Trail entrance

Walk east along the pathway until the trail entrance designated by the post. Next to it on the right is a young **Ponderosa pine**.

The word "Ponderosa" means big or heavy. The biggest Ponderosas surviving today are in the Sierra Nevadas and Siskiyous. The tallest are over 220 feet tall. Typically, they grow rapidly to 90-150 feet and live for about 600 years.

In the Pacific region, pines are the most valuable for their nutritious, oily seeds favored by many birds, such as crossbills, grosbeaks, jays, nuthatches, chickadees, woodpeckers and small mammals, such as chipmunks and squirrels.

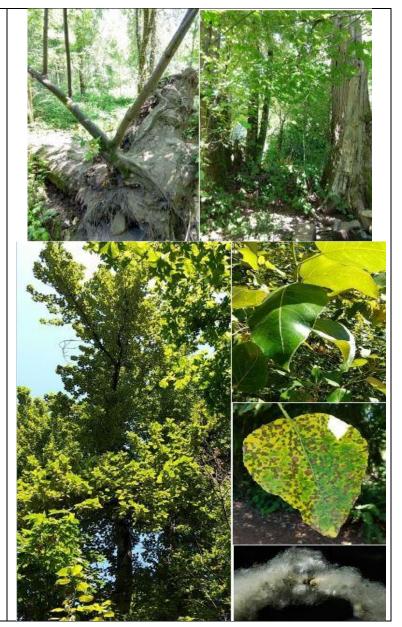




6 Fallen tree

Follow the park pathway past the trail entrance and see a fallen tree to the right. It is in a grove of **Black cottonwood**, a species of Cottonwood also called Balsam poplar.

Black cottonwood is a Pacific Northwest native deciduous tree which can grow to a height of 150 feet and 40 feet wide. It is normally a dioecious species, with male and female catkins (flower cluster) produced on separate trees. Female catkins bear copious amounts of silky tufts, referred to as "cotton", which contain small seeds and help carry in the wind. Cottonwood colonizes some of the roughest territory taking root in pure sand or gravel along riverbanks.





Wood bridge | Continue on the trail to middle of the wood

bridge and see **Oregon Ash** to the right. It is deciduous with wide leaves and native to Pacific Northwest. It can grow to heights of 60 to 80 feet and trunk diameter of 1.5 to 2.5 feet.

It helps with riparian restoration due to its wide root system and quick growth.





8 Green island

Walking further the pathway curves to the right and ahead is a green island on one side and the trail going through it. Past the green island, there is a clump of **Bitter Cherry** trees on the right.

Bitter cherry flowers April through June, with classic white cherry blossoms of five petals. The little cherries, or drupes (single-seeded berries), are red to almost black in some cases and taste bitter, at least to us. But many birds, squirrels, foxes, black bears, coyotes, chipmunks and raccoons don't seem to mind.





8		Further ahead is a grove of young Western redcedar , one of the most magnificent conifers in Pacific Northwest forests with some living over 1000 years. They easily grow to 200 feet tall and 20 feet in diameter.	
		The Western redcedar is often referred to as "the cornerstone of northwest coastal Indian culture." Among the names given this tree were "tree of life" and "life giver," and some tribes called themselves "People of the Cedar." Groves of ancient cedars were symbols of power, and gathering places for ceremonies, retreat, and contemplation.	
9	Basketball court	Walking further brings to the basketball court. There are a few Vine maples and a Japanese snowbell that are planted. Vine maple is native to western North America especially the California coast. It is popular for rugged growth habit, interesting bark coloration, and beautiful fall leaf color. It also flourishes as an understory tree in moist woods with bigleaf maple, Douglas-fir. Japanese snowbell is a deciduous flowering tree native to Japan, China and Korea that makes lovely ornamental with slightly fragrant white bell-shaped blossoms that bloom May to June.	



10	NE 17th Pl and 173rd NE	Walking further along the pathway brings to the entrance. Continue the tour on the sidewalk headed north. At the northeast corner of NE 17th Pl and 173rd, see the Weeping Willow. It is a willow native to China and historically traded along the Silk Road. It can grow to 60 feet tall. Across the street see a couple of tall Cottonwoods.	
		Continue past the Weeping willow to see the Katsura tree along the white fence. It is a deciduous ornamental tree with male tree producing red flowers and female trees producing green flowers. A little further up is Curve-leaf yucca , a woody evergreen with narrow 3 feet long leaves that curve downwards.	



11	Past NE 18th Pl and 173rd NE	Walk past the intersection of NE 18th Pl and 173rd NE and come upon the Hinoki Cypress right next to the side walk. It is native to Japan and is a slow growing ornamental evergreen with tight foliage. It can reach up to 115 feet tall and 3 feet in diameter.	
12	NE 19th PI and 173rd NE	You have reached the grand finale to the puzzle. The tree is literally named the Monkey Puzzle tree. Chile's national tree, the monkey puzzle, is an extremely longlived evergreen species native to the Andes Mountains of South America. Introduced to many gardens as an ornamental plant in Europe and the USA, they can grow to 100 feet tall and live as long as 1000 years. It seems common name comes from the idea that "it would puzzle a monkey climb it".	