TOUR GUIDE

Please be mindful that this is a botanical garden. Stay on the paths to keep yourself and the plants happy, and please don’t pick anything! After checking in at the admissions window, walk around the booth to see the Pollinator Garden.

POLLINATOR GARDEN AND FIRESIDE ARBOR

The Pollinator Garden is designed in a prairie style with a mix of perennials and ornamental grasses flanked on the edges by woody shrubs. The garden provides pollinators such as birds, bats, butterflies, moths, and bees with food and shelter. Approximately 48,000 plants were planted in the upper garden, 30,000 of which were bulbs, including 276 unique species.

Walk along the Pollinator Garden paths as you wish and then arrive at the Fireside Arbor.

The arbor is made of kebony wood—a softwood product that has undergone an environmentally friendly process to make it a sustainable, long-lasting alternative to tropical hardwoods.

AERIAL TREE WALK: Enter on the west side.

The tree walk was carefully constructed to accommodate almost all of the existing trees and to provide a bird's eye view of the surrounding garden. It is 36' high at its highest point.

Midway around, look for the tall stewartia, Stewartia monadelpha.

The stewartia is one of the garden's four Heritage Trees. Heritage Trees have been recognized by the City Council for their unique size, age, and historical or cultural significance. They are designated with a small plaque and are listed in the Heritage Tree database. Tall stewartia is known for its orange, peeling bark, lovely camellia-like flowers, and vibrant fall color.

Check out https://www.portland.gov/trees/heritage to find trees in your area.

Turn around and look down from the other side of the tree walk. You'll see part of the original cobble-lined pathway built by John Leach.
MISSOULA FLOOD COBBLES

These cobbles were deposited by a series of 40-50 floods that occurred between 18,000 and 15,000 years ago. Called the Missoula Floods, they occurred when a massive ice dam broke in what is now Montana, releasing a 400-600-foot-tall river of water, traveling at 60-80 miles per hour. You can see its path on the map below.

CONTEMPLATIVE PLACE

Local artist Michihiro Kosuge designed and installed these carved and shaped stones in the northwest corner of Ed Benedict Park in 1996. The installation was relocated to the garden in 2019 after the construction of a skate park near the original site. This is a quiet place, for contemplation," Kosuge said. “As a sculptor, I ‘put my heart into stone’; and now, it's in an ideal setting.”

FAR MEADOW

In most areas of the garden it's important to stay on the paths and to walk, but this open, grassy area is a great place for children to run and play, and you might even see a rabbit, deer, or squirrel!
As you leave the Contemplative Place, turn right (east) and walk along the gravel path until you see a Douglas fir tree next to a living stump, near the east fence line.

**WOOD WIDE WEB**

The stump to the side of the tree was capped over with bark because the tree still feeds it through a network of fungal mycorrhizae (pronounced my-core-rye-zee). Mycorrhizae have relationships with about 90% of all plants. They enter the root system and provide water and nutrients to the plant. The plant in turn provides the fungus with the carbohydrates that give it energy.

Plants can exchange nitrogen and phosphorus with each other by this same mycorrhizal route, and in their interactions with each other they are often helping each other to survive.

Although we see mushrooms (the 'fruits' of the fungus) above ground, most of the fungus is below ground. In fact, the world's largest known living thing is the Humongous Fungus that covers almost 4 square miles in the Malheur National Forest in Oregon.

**CHINESE OR TEA CAMELLIA, *Camellia sinensis***

A shrub or small tree native to India and Southeast Asia, this camellia is the source of all kinds of tea—the most widely consumed drink in the world. It can grow into a tree, but farmers keep it at waist height for ease of picking. Only the new shoots, leaf buds, and 2-3 surrounding new leaves are picked.

Tea is divided into categories based on how long it’s left to dry and oxidize; the longer the process, the darker it gets.

- White tea: wilted and unoxidized
- Yellow tea: unwilted and unoxidized, but allowed to yellow
- Green tea: unwilted and unoxidized
- Oolong: wilted, bruised, and partially oxidized
- Black tea: wilted, sometimes crushed, and fully oxidized
- Post-fermented, or pu-erh: green tea that has been allowed to ferment

Enjoy wandering the trails of the HISTORIC HILLSIDE GARDEN before returning to the east fence. Follow the trail down the hill until you see a sign with a large 5 on it.
The five acres to the east of the fence are undergoing a revitalization with extensive replanting of native plants. The area is a living lab with programming designed to engage, educate, and connect people of different cultural backgrounds, both to each other and to the land. Yearly surveys of plants, macroinvertebrates, and amphibians are conducted, assessed, and analyzed. A large vernal pond provides breeding and rearing habitat for amphibians, including northern red-legged frogs and ensatina salamanders. Ongoing workshops focusing on macro-invertebrates, pollinators, traditional ecological knowledge, community science, ornithology, plant identification and propagation, geology, and health in nature encourage youth to bring their own curiosity and perspective to the natural world. Partners include The Blueprint Foundation, African Youth & Community Organization, David Douglas High School, Wisdom of the Elders and Johnson Creek Watershed Council.

Keep walking down the path along the fence until you come to the back of the Manor House and the brick and stone terrace. Near the Manor House, you’ll see a large tree in a garden bed.

HAWTHORN TREE, Crataegus x lavallei

Another one of the garden’s Heritage Trees, this hawthorn has clouds of white flowers in spring, followed by yellow fall color and long-lasting red winter fruits. Look carefully to see the rows and rows of small holes created to make the sap flow by a woodpecker called a red-breasted sapsucker.

The sapsuckers make the holes with their beaks and then lap the sap up with the tip of their brush-like tongue. Their tongue actually wraps around their brain as they bang on trees, protecting them from injury. (Some sports helmets are modeled after this adaptation.) Most trees easily survive the hundreds of tiny holes these birds drill, in the same way that maple trees survive tapping for syrup.

The hawthorn is also a popular tree with bees and can be abuzz with hundreds of bees on warm summer days when in full bloom.
This very spiky, large-leaved plant is native to the Pacific Northwest. The genus name, Oplopanax, is derived from ‘hoplon’ meaning weapon, and ‘panakos’ meaning “all-heal,” referring to its many medicinal qualities. The species name, horridus, refers to its wicked, spiny looking appearance.

Find your way to the trail that follows along the creek. Please stay on the path to protect this sensitive riparian habitat.

The creek provides habitat for small numbers of chinook and coho salmon, steelhead, and coastal cutthroat trout. There are also native mussels, river lamprey, and lots of crawdads. Beware! Not only are some of these species protected due to their rare and endangered status, they are not safe to eat out of the creek due to heavy metals and other contaminants.

Keep walking on the creekside trail toward the SE 122nd Avenue bridge. Look for this tree:

The western redcedar is the largest tree in the cypress family and is not actually a true cedar at all! Redcedars can grow 100-200 feet in the wild with girths of up to 23 feet. They are valued and revered by Indigenous communities for their myriad uses, including making canoes, baskets, clothing, and more. Redcedars can live for hundreds of years, with the oldest known specimens dating over 1000 years. These iconic native Pacific Northwest trees are severely impacted by the effects of climate change as they are not adapted to the excessively hot, dry summers that are becoming more and more common.

Keep walking along the creek and then follow the trail uphill to the driveway and main gate. Directly across from you is a very large tree.
Ginkgo biloba is the only survivor of an ancient family of 18 tree species. The decline of the dinosaurs likely contributed to their extinction as dinosaurs were considered to be the seed distributors of the time. The ginkgo is a deciduous tree that can grow up to 100 feet tall and is unique in losing almost all of its leaves in one dramatic, sudden leaf-drop event. The oldest recorded living ginkgo tree, found in a village in western China, is at least 3500 years old.

**ATLAS CEDAR, Cedrus atlantica**

Also a Heritage Tree, the Atlas cedar was first brought to Europe from the Atlas Mountains in northern Africa in the 1840s and then to the US. This specimen predates John and Lilla's purchase of the property. You will often see scales on the ground under this tree as mature cones usually open and fall apart while still sitting upright on the branches—part of the tree's seed-scattering strategy.

*Walk up the driveway towards the Manor House to find the fourth Heritage Tree on the right, in front of the Manor House.*

**GINKGO TREE, Ginkgo biloba**

The ginkgo is an ancient tree that has not changed much in over 230 million years. Considered to be a living fossil, it is often used in paleoclimatic studies because of its remarkably long history and excellent fossil records. Though native to China, there are fossil records of forests of metasequoia, ginkgo, sycamore, oak, and sweet gum in Oregon during the Miocene epoch,* and petrified ginkgo logs have been found in the Columbia Gorge.

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*Just across from the ginkgo tree, you’ll find some very tall grass!*  

**BLACK BAMBOO, Phyllostachys nigra**

Black bamboo is native to China and Eastern Asia. Bamboo is evergreen and is the fastest growing plant in the world. One species can grow up to 35 inches per day (0.00002 mph) and the tallest ever recorded was 130 feet tall. Black bamboo can reach 35 feet tall. When it’s two years old most of the stems become black, but may also be brown. After it dies, it often turns a pale brown.

You have finished the tour! If you'd like to learn about Lilla and John Leach and how the garden came to be, look for the Garden History sign located outside of the shop.

*https://www.oregoneology.org/pubs/B/B-092.pdf: DOGAMI BULLETIN 92, Fossils in Oregon