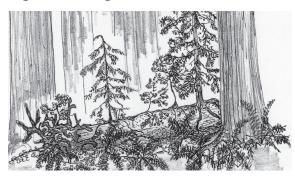
6. Forested Headwaters

In front of you and behind you are seeps and springs, which are the origins of the creeks below. They first emerge by fractures in the earth, or by changes in soil permeability, allowing underground water to break to the surface. Here, you'll see plants and trees that thrive because of the moisture. You can spot the difference between the dry forest and emergent water by the appearance of skunk cabbage, grasses, sedges, and rushes that flourish in the moisture. Pause and listen for the faint trickle of water.

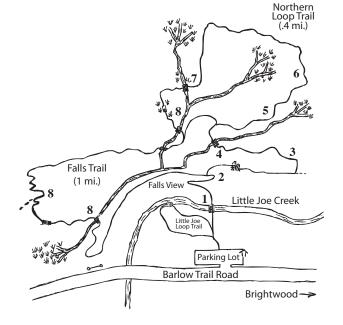
7. Nurse Log

A nurse log is a fallen tree that becomes a resource of nutrient rich organic matter, water, and insects that vegetation and animals depend on. This very old nurse log supports a variety of fungi, mushrooms, mosses, ferns, red huckleberry, along with hemlock seedlings. (You can spot a hemlock by the drooping top.) As you continue along the trail, watch for a nurse log nourishing mature trees.



8. Forested Wetlands

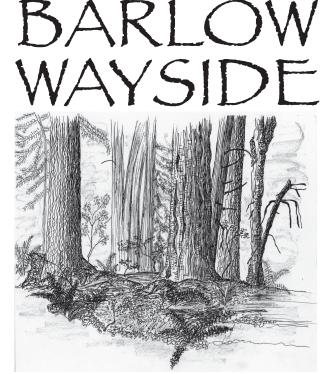
Wetlands are just that: land that is permanently or intermittently saturated with water. The water table is at or near the surface, rising with seasonal flooding. Wetlands are complex, vital ecosystems that support a wide variety of plants and wildlife. Most noticeable is the prevalence of skunk cabbage with their large glossy green leaves and yellow blossoms in the spring (catch a whiff?). See if you can spot animal prints in the nearby mud or glimpse birds as they take advantage of this rich resource.











WELCOME!

You are about to enter a forested wonderland where everything is part of a whole—every plant, animal, tree, fish, bird, bug, and slug has its place.

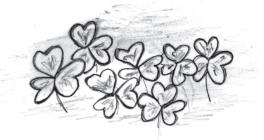
1. Ríparían Area

Riparian areas border all wet sites, streams, and rivers and extend a few feet to a mile or more. Shrubs and trees thrive here, providing shelter and food for birds and animals as well as shade to keep the water cool for fish. Insects are plentiful here too, supplying fish, birds, and mammals with nourishment. Vegetation at this spot includes salmonberry, Indian plum, ninebark, alder, cedar, and cottonwood trees.

2. Bench Geology

In the Fall/Winter of 1781-82, during the most recent eruption of Mt. Hood, dubbed the "Old Maid Episode," several massive debris flows swept down the Sandy River valley, eventually reaching the Columbia River. These debris flows carried a mixture of water, ash, and boulders with the consistency of wet concrete and buried the valley floor under thick deposits of mud.

WHEN THE Lewis & Clark expedition stopped at the confluence of the Columbia and Sandy Rivers in 1805, William Clark noted the tributary had the consistency of quicksand and named it the "Quicksand River"—today known as the Sandy River. Soon thereafter, subsequent floods eroded much of that deposited material and left only remnant terraces, including the two that you see here.



3. Carpeted Woodland

In spring, summer, and fall the lovely wood sorrel (Oxalis oregona) covers the moist forest floor. This sensitive herb will close its leaves to reduce impact stress during heavy rains, intense sunlight (to avoid sun scorch), and at night, when there is no need for photosynthesis. In the spring, watch for wildflowers such as lady slippers, trillium, and bleeding hearts amid the wood sorrel.



LOOK FOR mushrooms here, especially in the fall. Mushrooms are the surface "fruit" that carry spores for propagation. Some mushrooms grow on organic matter (dead trees), while others in the soil are part of a larger, unseen underground fungus organism. Mycorrhiza is a symbiotic process that connects underground fungi with plant and tree roots. This mutually beneficial association is critical for plants, trees, and the fungi that share water, nutrients, and enzymes. Over 90% of the vascular plant species in the world form these crucial mycorrhizal relationships

4. Dead Trees

A dead tree almost always supports more life than a live one. Standing dead trees (snags) and fallen trees are essential to the health of a forest. Besides providing perching and nesting sites for birds, snags provide food and shelter for insects, which in turn are a food supply for birds and mammals, including bears. Snags are vital for cavity-nesting birds, such as chickadees, nuthatches, and saw-whet owls and shelters for mammals, like raccoons, pine martens, and skunks. FALLEN TREES become nurse logs (See 7.) and provide critical habitat for amphibians such as salamanders. They also provide cover and shelter for birds and mammals including rodents, short-tailed weasels, and foxes.

5. Native Forest

This temperate rain forest is sustained by wet storms from the Pacific Ocean colliding against the Cascade Mountain Range. The average annual rainfall is around 90 inches, more than twice that of nearby Portland. Species richness here is influenced by low elevation (1150'), an abundance of water, and wide-ranging habitat.

THE SITE was swept by wildfires in the late 1800s and logged in the early 1900s, but was not clear-cut so the trees and plants are unevenly aged and diverse. This forest is primarily Douglas fir, Western hemlock, and Western red cedar with an understory of sword fern, salal, Oregon grape, and vine maple. The park's riparian areas, created by seeps, springs, and streams, nurtures fantastic habitat for all forms of flora and wildlife.

Díd you know?

Not only seeps and springs, snowmelt, and rain nourish this green wonderland. Fir trees collect the high mountain mists captured from clouds, referred to as "fog drip." A single fir tree can hold over 1,000 gallons of water on the surface of its needles.