

## NATIVE PLANTS AT SEAHURST PARK

### EXPLORING NATIVE PLANTS AT SEAHURST PARK

Native plants play a critical role in the web of life at Seahurst Park. While animals and insects depend on plants for food and shelter, many plants also depend on animals and insects to disperse their seeds and pollen necessary for reproduction. In the Northwest, this cycle of interdependence has evolved over millions of years creating the species we find today.

Seahurst Park is classified as a temperate forest and is home to some of the most ancient plants, including ferns and horsetails, which evolved more than 350 million years ago when earth's climate was much more humid. Since that time, Seahurst Park's plant life has diversified to include evergreen conifers, flowering plants including broad-leaved trees, and much more.

The park's forest canopy consists primarily of red alder and bigleaf maple trees. Douglas-fir, western hemlock, and western red cedar also contribute to the layers of the forest. Plants of the understory include evergreens such as red huckleberry and dull Oregon grape plus numerous shrubs such as salmonberry. On the forest floor, grow smaller plants such as fringe cup, Siberian miner's lettuce, and the rare Indian-pipe. Each of these plants occupies a special niche in the forest layers and contributes to a complex food web.

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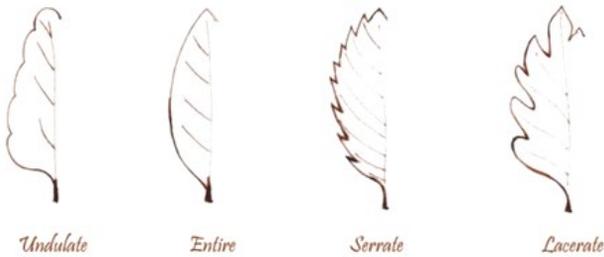
#### IDENTIFYING PLANTS

This guide includes native understory plants most common to Seahurst Park and is divided by plant families. Like the study of any living form, botany categorizes plants into families to better understand their similarities and possible paths of evolution. Included are diagrams on leaf identification and flower anatomy. Use these diagrams to notice how plants within the same family share common characteristics. This knowledge can then be applied to plants not mentioned in this guide.

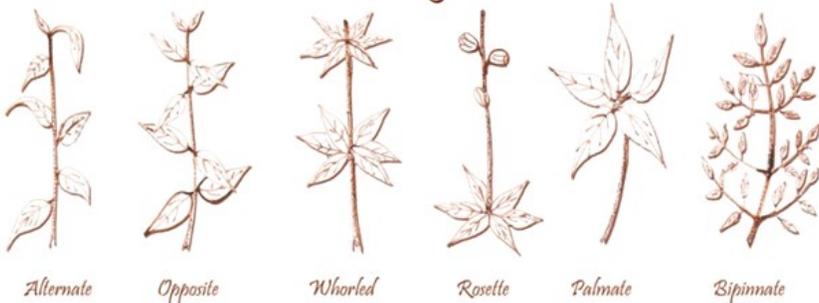
*Leaf Shapes*



*Leaf Margins*

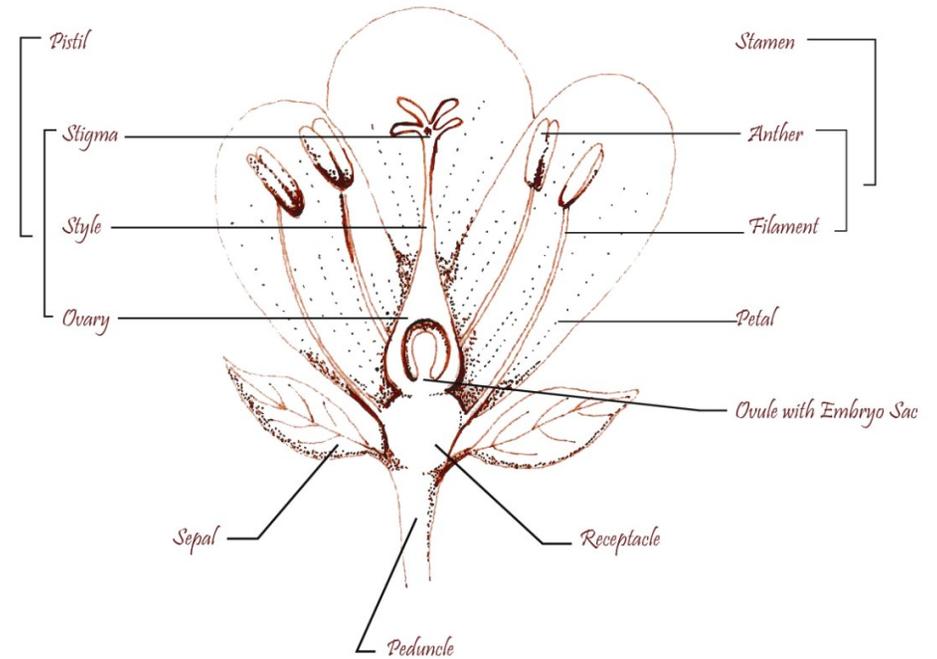


*Leaf Arrangements*



Leaves gather sunlight and convert this energy into food through a process called photosynthesis. Notice how a plant's leaves are designed and arranged to maximize their exposure to light. Careful analysis of a leaf's shape and margin (or edge) as well as how it is arranged on the plant's stem is a critical part of plant identification.

*Flower Anatomy*



With the exception of ferns and horsetails, the plants in this guide are flowering plants. Flowers serve an important function as the reproductive system of the plant and contain both the pollen producing male stamen and the seed-bearing female pistil. Seahurst Park is home to numerous flowering plants that spread their seeds through the production of fruits that aid in dispersal.

## EQUISTALES FAMILY



The sterile stems are bright green and much branched  
The fertile stems are shorter, thicker, unbranched and brownish to nearly whitish in color



Fertile stalk holds the spore-producing structure at the top



Hollow, jointed stems



"Horsetail" is the sterile part of the plant

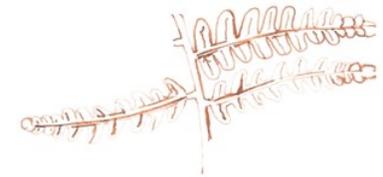
*Equisetum arvense* (Horsetail)

Around 350 million years ago, the family Equisetales evolved in moist, primeval forests. Horsetails are the only extant genus of that plant family -- living fossils! A silicon compound in their stems and branches makes them one of the world's toughest plants. Next time you see one of these plants in the forest, take a moment to consider the evolutionary journey they have made to survive in an ever-changing world.

## FERN FAMILY



Large, solitary fronds  
Triangular-shaped blades  
Multiple branches

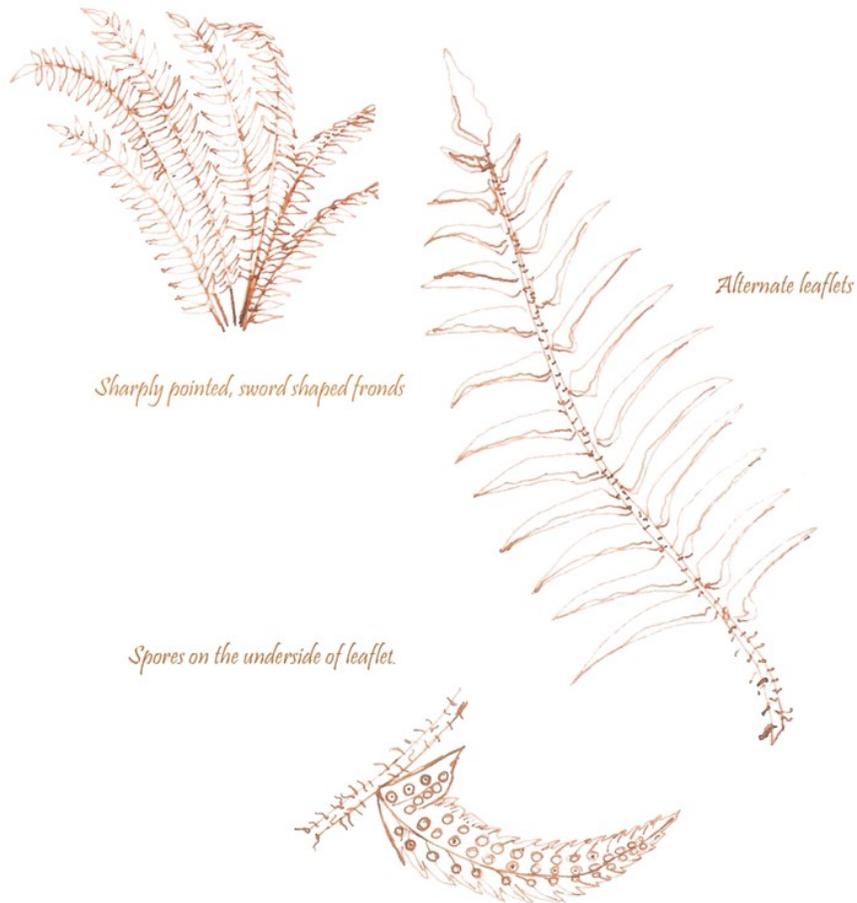


Young "fiddlehead" fronds

*Pteridium aquilinum* (Bracken Fern)

A hardy survivor, the bracken fern is the world's most widespread fern. Its root system can form huge clumps covering a wide range. This plant is also capable of inhibiting the growth of other plants by emitting a toxic chemical into the soil. The immature fronds of the bracken fern, called fiddleheads, are considered a delicacy. Be careful as this plant contains carcinogens that can be toxic in large quantities.

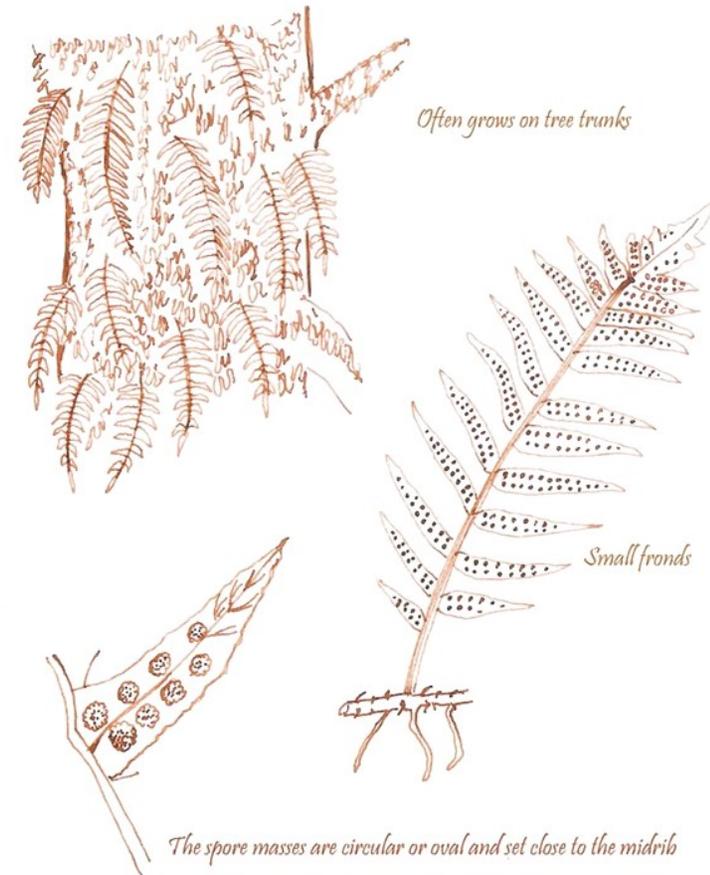
## FERN FAMILY



*Polystichum munitum* (Sword Fern)

Like horsetails, ferns evolved about 350 million years ago in primeval forests before the evolution of flowering plants and seeds. To reproduce, ferns depend on moist environments to germinate the spores which form on the underside of their leaflets. Spores differ from seeds in that they do not contain nutrients for the new plant. Spores are hearty and can survive in a dormant state until conditions are optimal for reproduction.

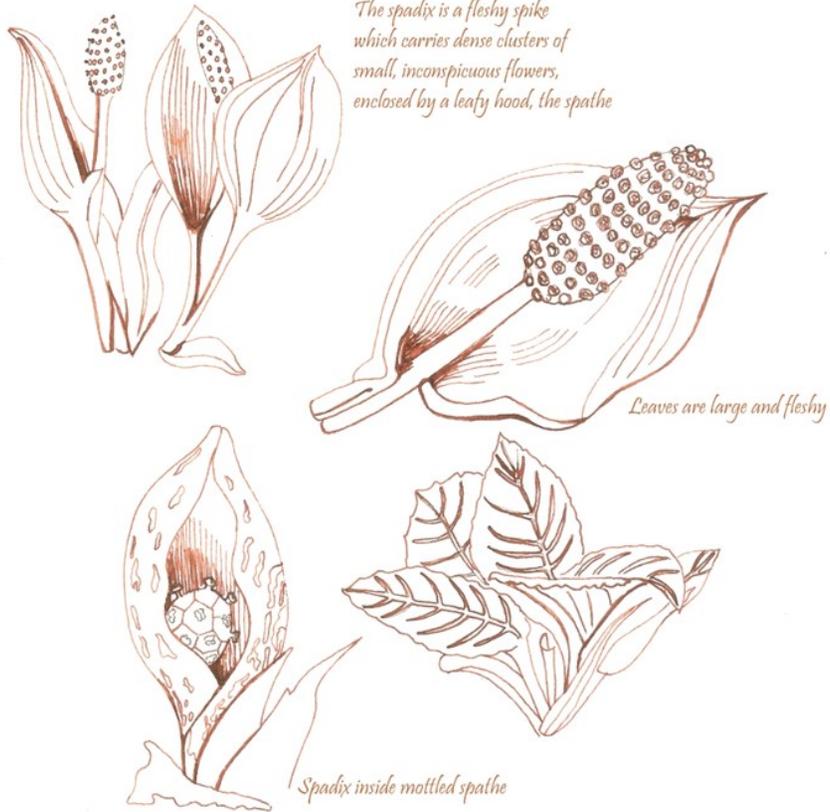
## FERN FAMILY



*Polypodium glycyrrhiza* (Licorice Fern)

Licorice fern is often found growing on the trunks and branches of deciduous trees such as the bigleaf maple. Called an epiphyte, or air plant, it grows by acquiring nourishment from rain and organic debris. Creeping, licorice-flavored rhizomes, or root stalks, give this fern its namesake. When the rootstock is dried, the sweet taste is 1,000 times sweeter than sucrose.

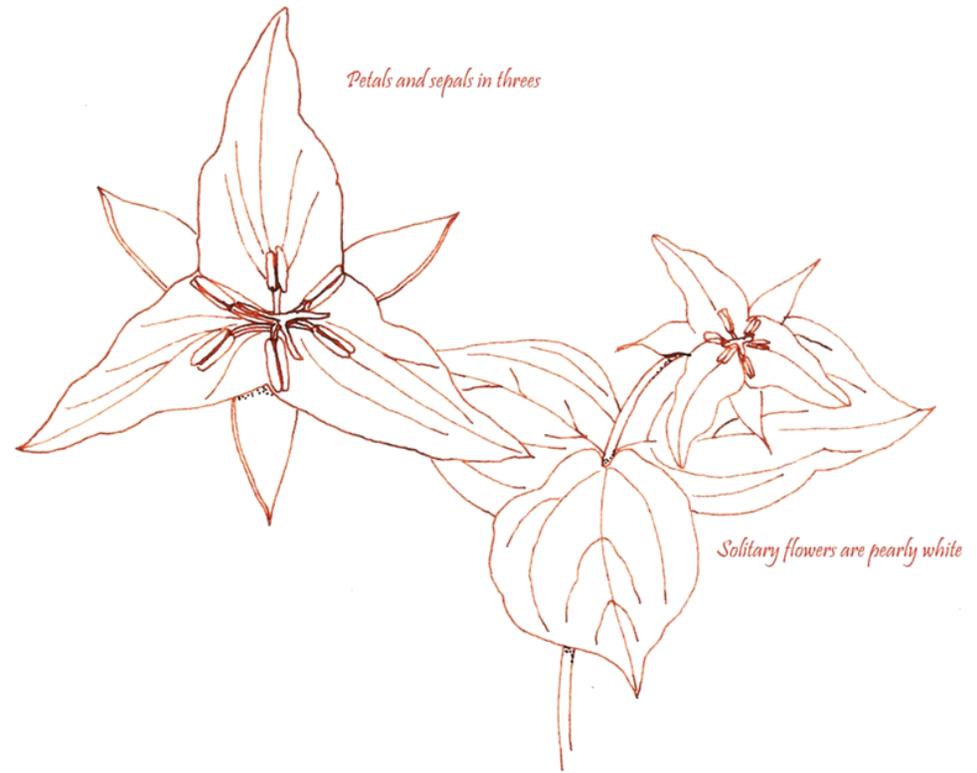
## ARUM FAMILY



*Lysichiton americanus* (Skunk Cabbage)

Aside from the bright-yellow, leafy hood, this plant is most distinguished by its namesake, a skunky odor. This smell, which mimics decaying flesh, attracts pollinators such as bees and beetles. The skunk cabbage is also capable of generating its own heat which it uses to radiate its foul odor. For native people, huge skunk cabbage leaves functioned as an all-purpose food wrapping and storage material.

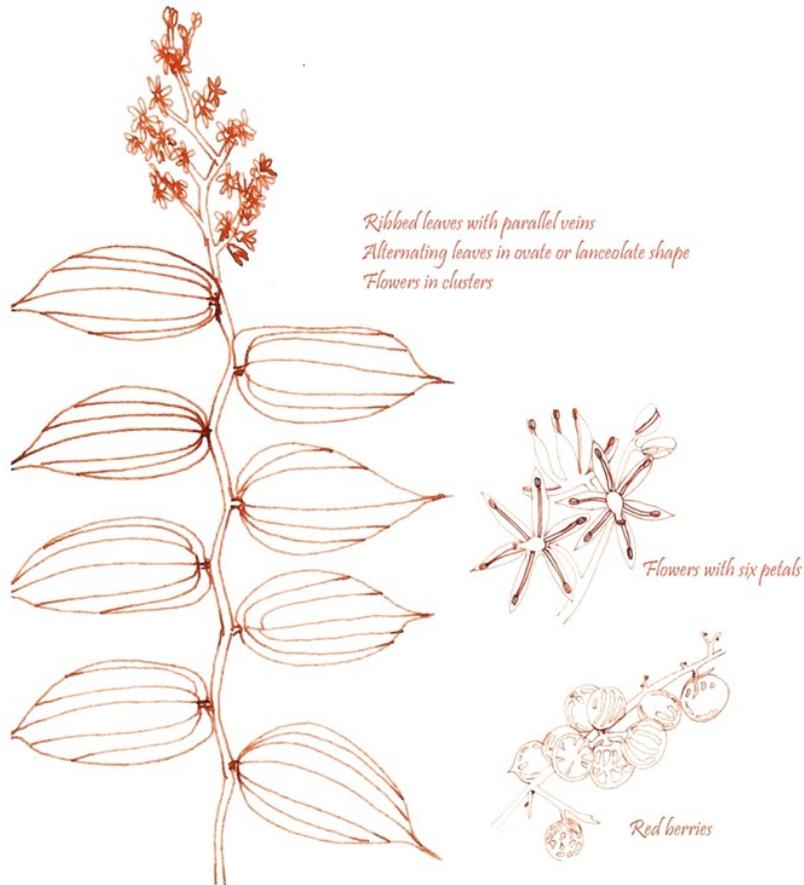
## LILY FAMILY



*Trillium ovatum* (Western Trillium)

Spring hikers and forest enthusiasts notice trillium blooming in early spring when the robins reappear. Thus, this plant is also called wake-robin. Besides its stunning white flowers which turn pinkish with age, trillium produces seeds with an oil-rich appendage that attracts ants to aid in their dispersal. Perhaps because of its beauty, parts of the trillium were used in love potions by certain native tribes.

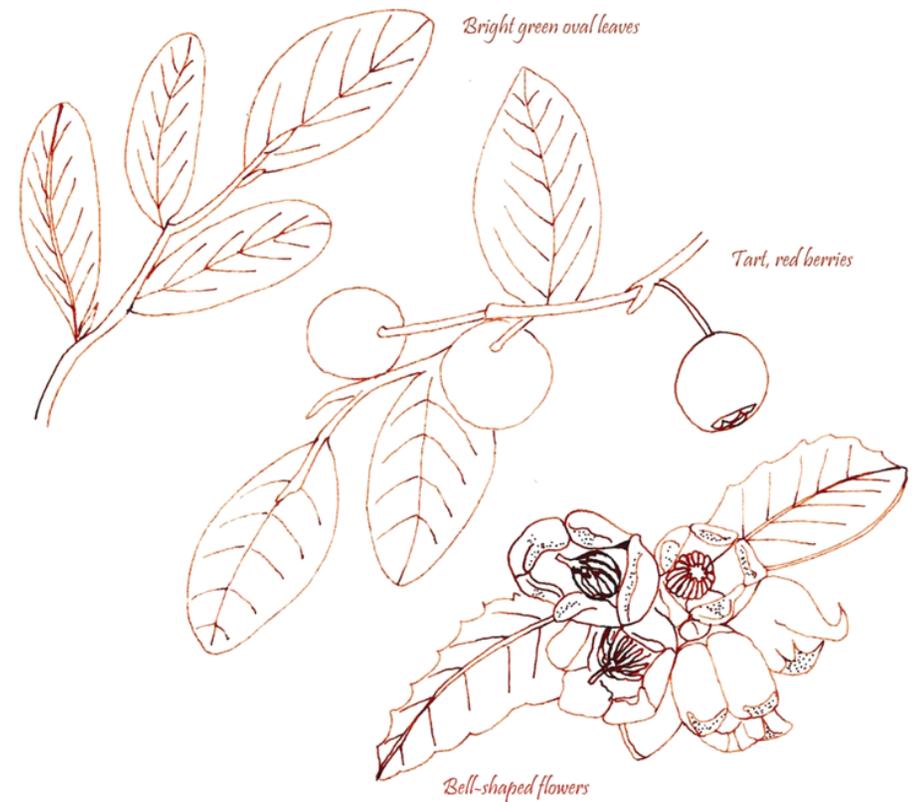
## LILY FAMILY



*Smilacina racemosa* (False Solomon's-seal)

Many gardeners enjoy the false Solomon's-seal for ornamental foliage in shaded gardens. Like other members of the lily family, this plant features flowers with petals in groups of three or multiples of three. The small flowers are strongly perfumed and the red berries are edible, though not very palatable. Other toxic plants look similar, however, so do not eat it unless positively identified.

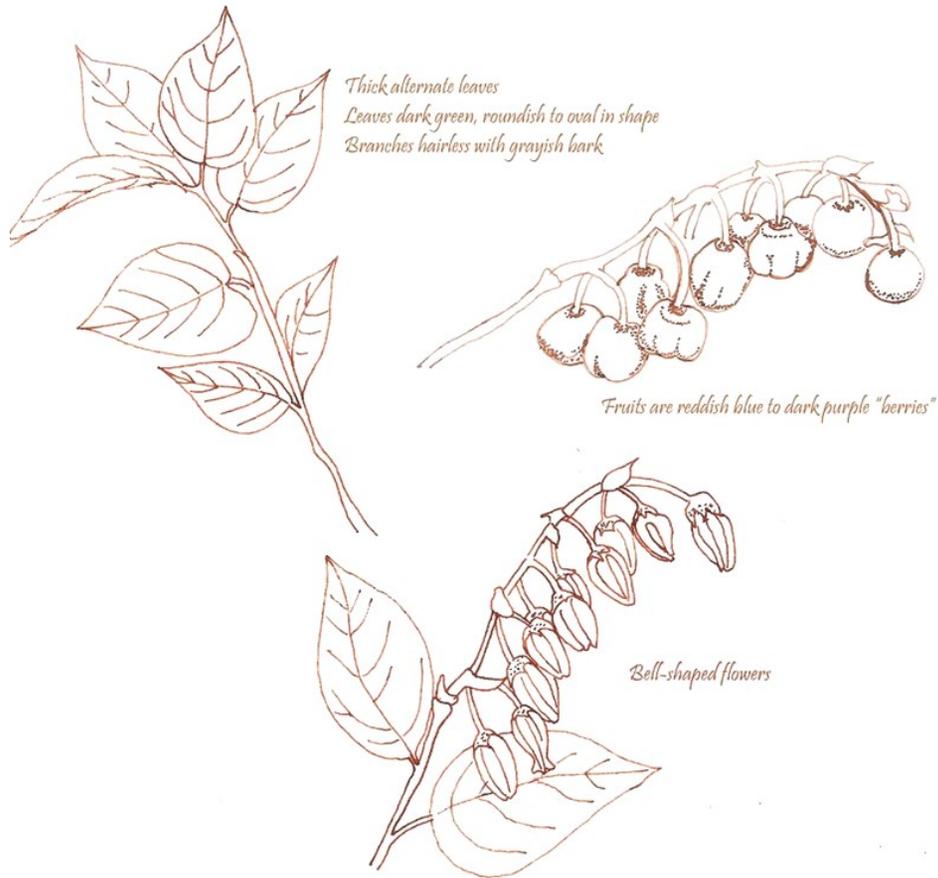
## HEATHER FAMILY



*Vaccinium parvifolium* (Red Huckleberry)

Old cedar stumps often provide the nutrient-rich and highly acid soil in which red huckleberries thrive. The berries were combed off the plant and used by native people for fish bait and dried into cakes for winter storage. Native folklore describes the Wild Woman-of-the-Woods kidnapping anyone who ate the berries of the red huckleberry.

## HEATHER FAMILY



*Gaultheria shallon* (Salal)

A common understory shrub, the salal has a symbiotic relationship with a fungus which helps it survive in nutrient-poor soils. Many native tribes valued its berries which were dried into highly prized cakes and stored in skunk cabbage leaves for the winter. Like other members of the heather family, salal features thick, evergreen leaves and bell-shaped flowers.

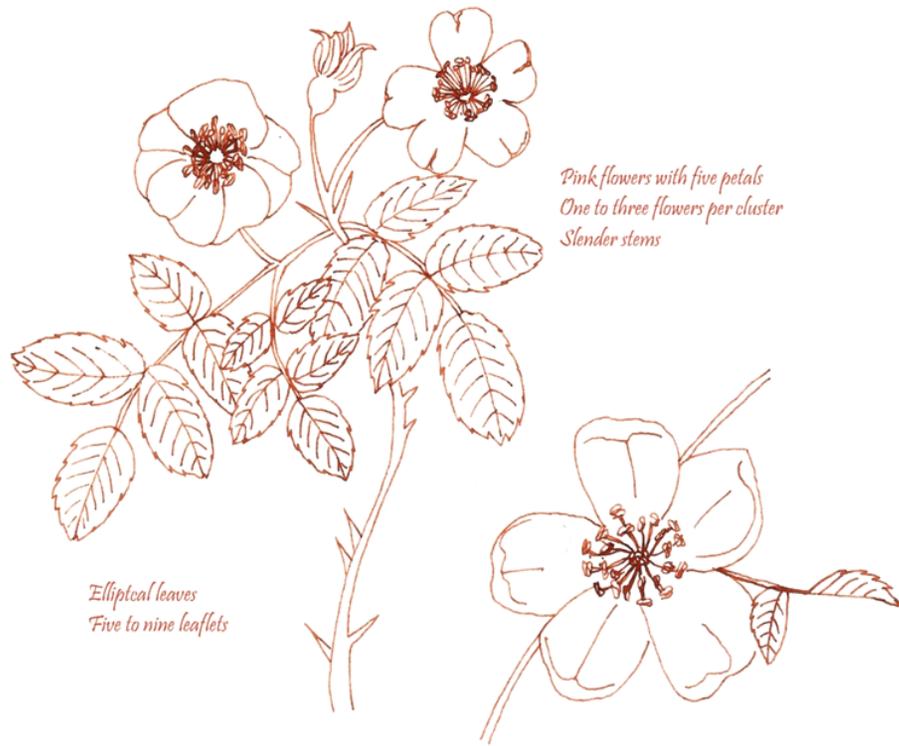
## BARBERRY FAMILY



*Berberis nervosa* (Dull Oregon Grape)

The dull Oregon grape, which is sometimes called Oregon holly, is commonly found in forests dominated by Douglas-fir. Like other members of the barberry family, its bright-yellow inner bark is prized by native basketmakers as a yellow dye. This same bark contains the alkaloid, berberine, which has been shown to strengthen the immune system and help fight infections.

## ROSE FAMILY



*Rosa gymnocarpa* (Baldhip Rose)

In early spring, the crowns of this flower's sepals fall from the fruit leaving the hip bald, thus giving its name, baldhip rose. Like other members of the rose family, its flowers feature five petals and numerous stamens. Other characteristics include an odd number of leaflets and thorny stems. Some native tribes believed the baldhip rose had protective qualities and used it during certain dance initiations.

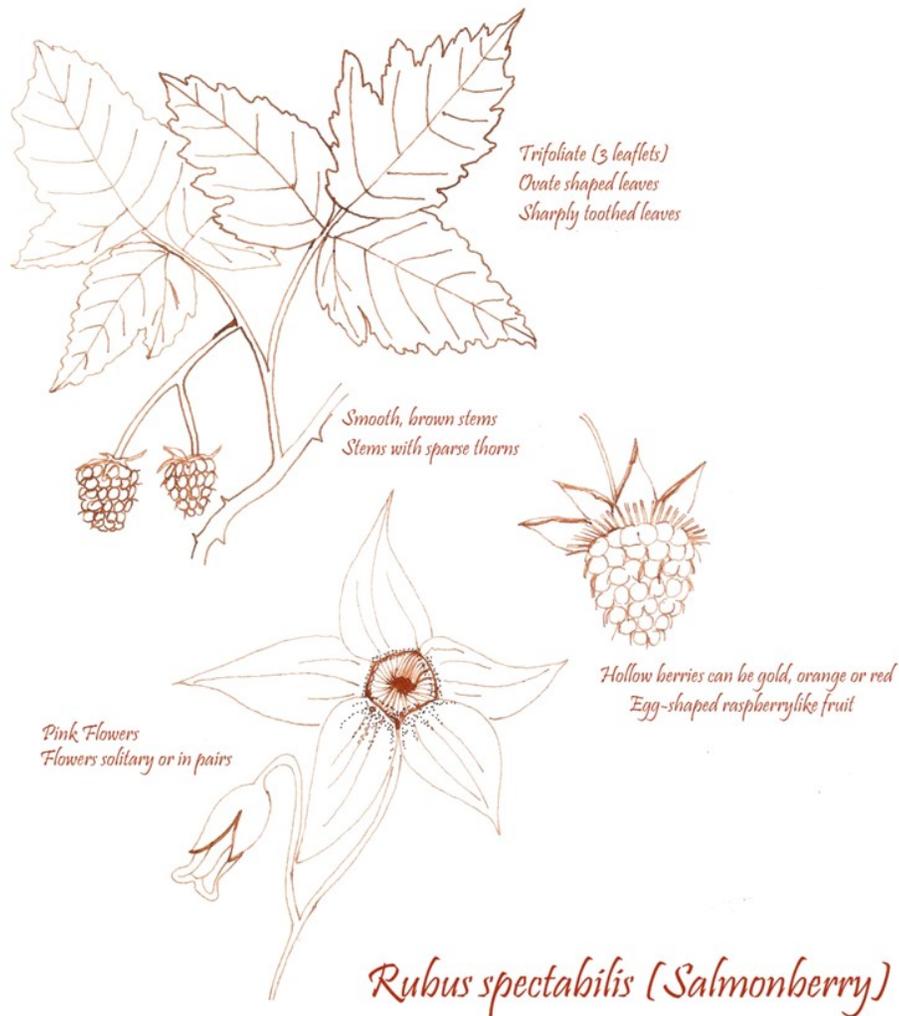
## ROSE FAMILY



*Rubus ursinus* (Trailing Blackberry)

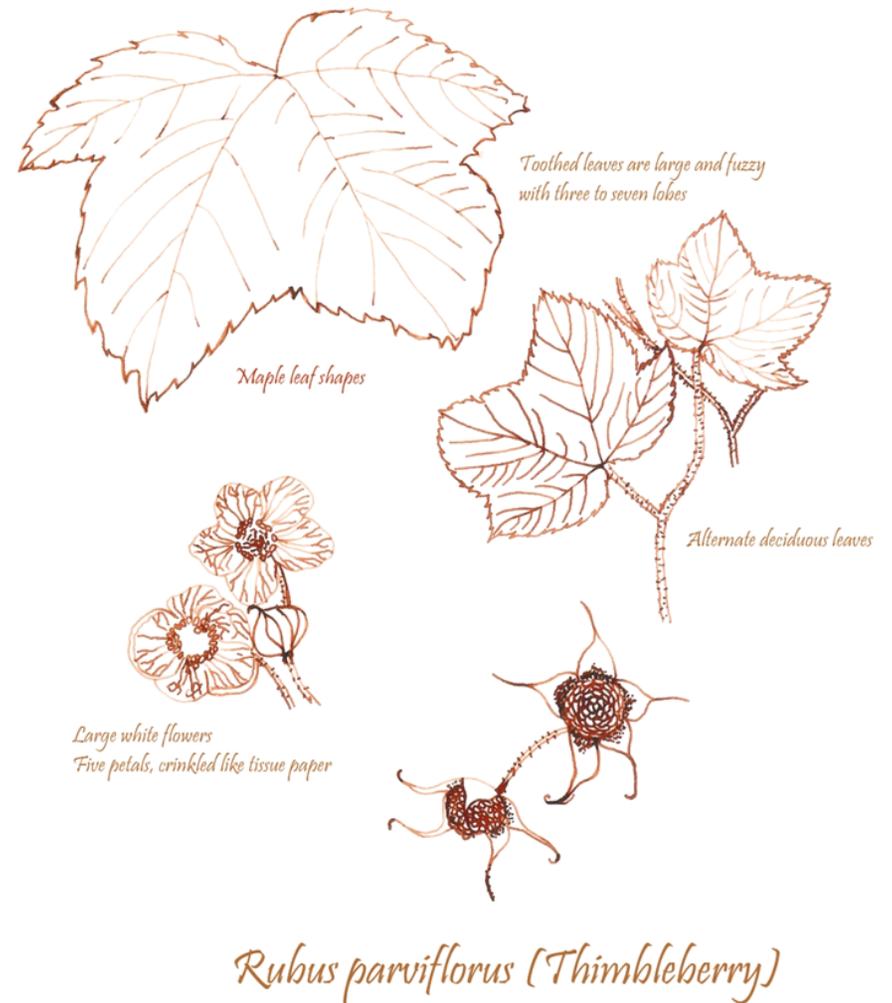
This is the Pacific Northwest's only native blackberry. Trailing blackberry exhibits purple-tinged stems from which grow leaflets in groups of three. It needs less sunlight than the invasive Himalayan blackberry and is usually found as a creeping groundcover. Male and female plants develop separately. While both plants will produce white flowers, the male flowers are larger. Berries are found only on female plants.

## ROSE FAMILY



The salmonberry's namesake comes from the native tradition of mixing and eating the berries with salmon spawn or salmon fat. The color of the berries, which can range from gold to orange to red, also evokes the color of salmon spawn. The ripening of the berries in early summer is often accompanied by the song of the Swainson's thrush, which is why it is also called the salmonberry bird.

## ROSE FAMILY



Thimbleberry is distinguished by its large, fuzzy, maple-shaped leaves. Its name comes from the fruits it bears which are thimble-shaped, semi-hollow berries. These appear in summer and turn from white to pink to bright red as they ripen. Native people prized the berries, collected the shoots, and used the leaves of the thimbleberry to line oven pits and baskets.

## ROSE FAMILY



*Basal leaves terminate in a large, oval-lobed leaflet*

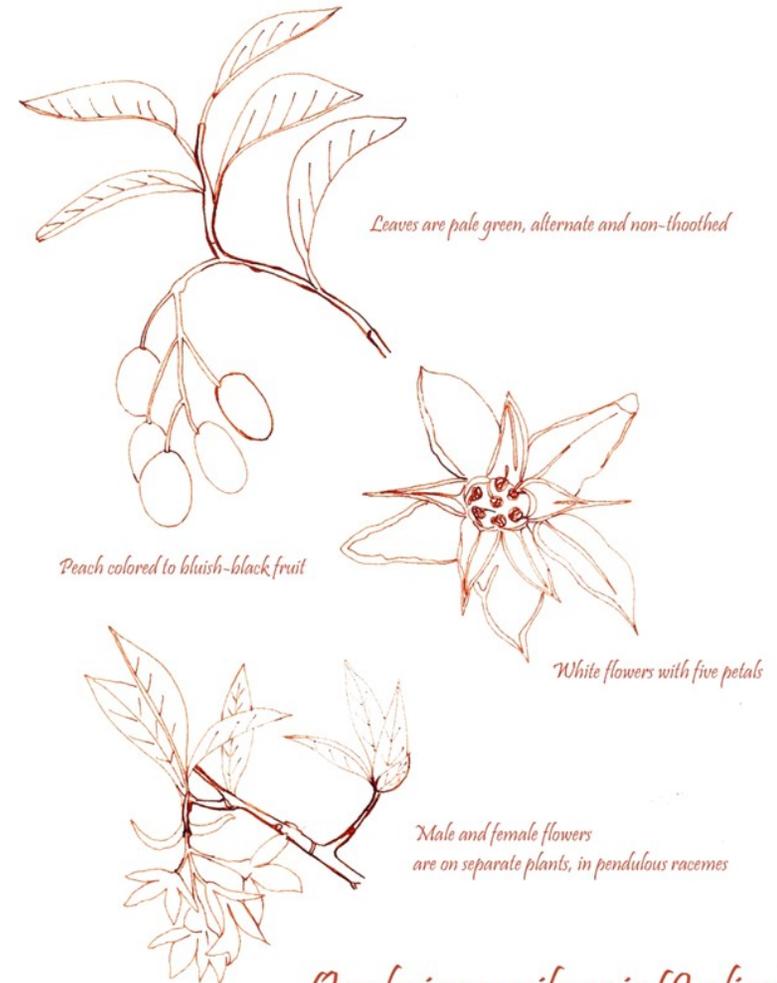
*Bright yellow flowers  
Five petals  
Sepals turned back beneath the flower*

*Produces round, brown burrs that catch*

*Geum macrophyllum (Large-leaved Avens)*

Large-leaved avens, like other members of the rose family, have a distinctive five-petaled flower. As it matures, this flower produces small, hooked fruits that act like burrs catching on animal fur and spreading throughout the forest. Because this plant appears at the same time seals give birth to their pups, the Quileute referred to it as 'hair seal leaves.' Also for this reason, some native people chewed the leaves during labor for a healthy delivery.

## ROSE FAMILY



*Leaves are pale green, alternate and non-toothed*

*Peach colored to bluish-black fruit*

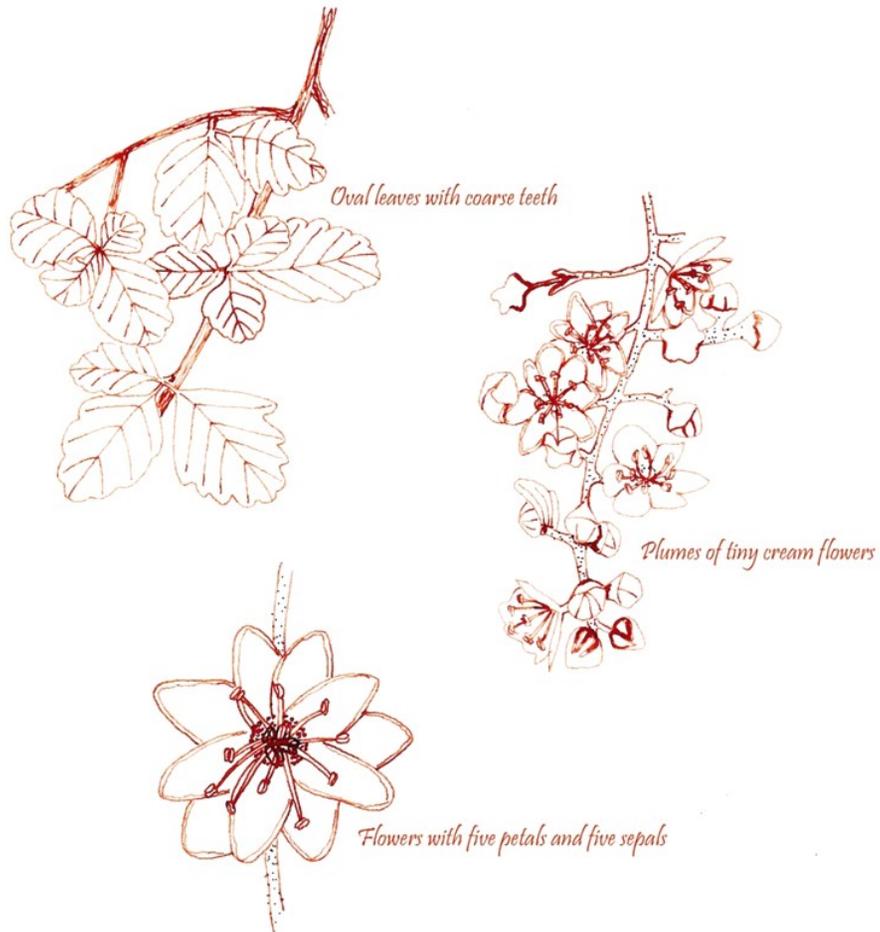
*White flowers with five petals*

*Male and female flowers  
are on separate plants, in pendulous racemes*

*Oemleria cerasiformis (Indian Plum)*

One of the first plants to flower in the spring, Indian plum is a plant of unusual smells. The crushed leaves smell like cucumber and the blooming flowers have a biting odor with a hint of watermelon. Indian plum is also called choke-cherry because of the bitter taste of its small, plum-like fruits and bird cherry because it is a favorite food of birds.

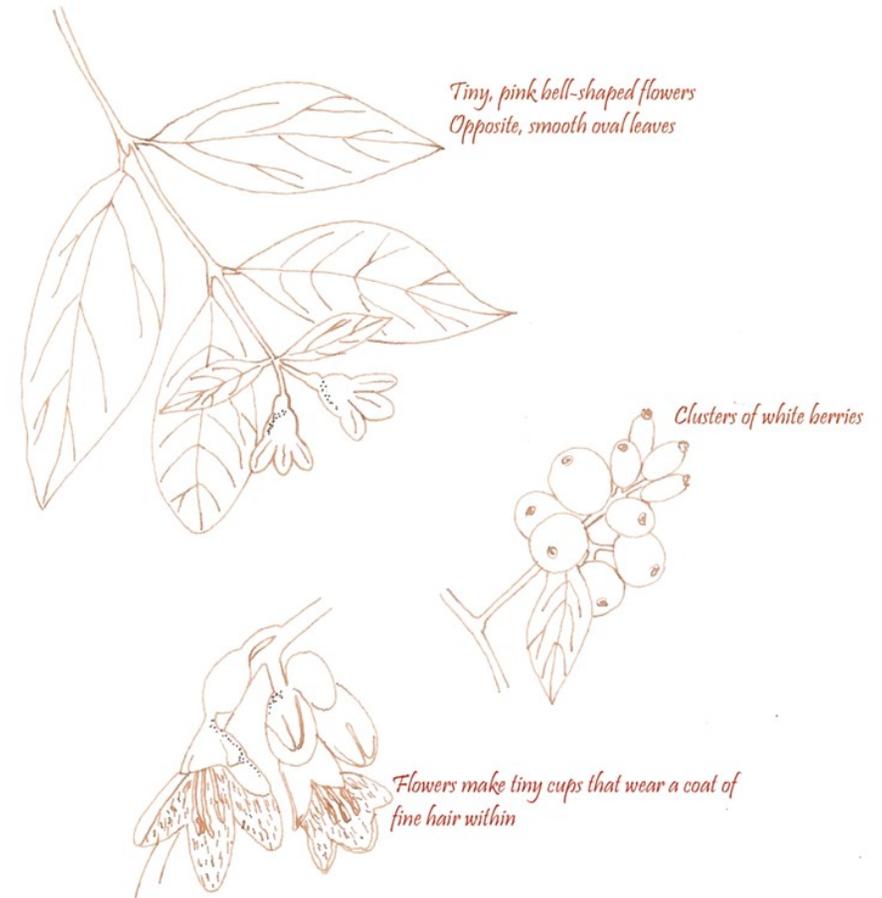
## ROSE FAMILY



*Holodiscus discolor* (Oceanspray)

Dense lilac-like clusters of cream-colored flowers give oceanspray its alternative name, creambush. Oceanspray is also called 'ironwood' for the strength of its wood which can be made harder with fire. Native people used oceanspray for making a variety of tools including spears, bows, arrow shafts, cattail mat needles, and hooks.

## HONEYSUCKLE FAMILY



*Symphoricarpos albus* (Snowberry)

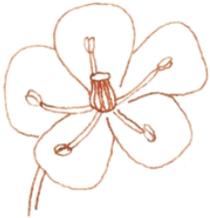
The snowberry has several aliases including waxberry, snowdrop berry, and popcorn berry. Like other members of the honeysuckle family, this plant exhibits berries in clusters and opposite leaves. Berries ripen in late summer and are edible, but not considered tasty. Native people believed the berries to be toxic and called them corpse berries or snake berries.

## HONEYSUCKLE FAMILY



*Compound leaf with five to seven leaflets  
Bright red berries*

*Flowers with unpleasant odor*



*Tiny cream flowers in clusters*

### *Sambuca racemosa (Red Elderberry)*

Red elderberry produces large clusters of cream-colored pungent flowers. Glycosides in its stems, bark, leaves, and roots produce cyanide, making this plant toxic. The red berries, which are a favorite food of birds, will cause nausea if eaten raw. Native tribes discovered that cooking red elderberries renders them safe to eat, and preserved them for a popular winter food.

## PRIMROSE FAMILY



*Tall, wand-like stems*



*Rose to purple flowers with four petals*

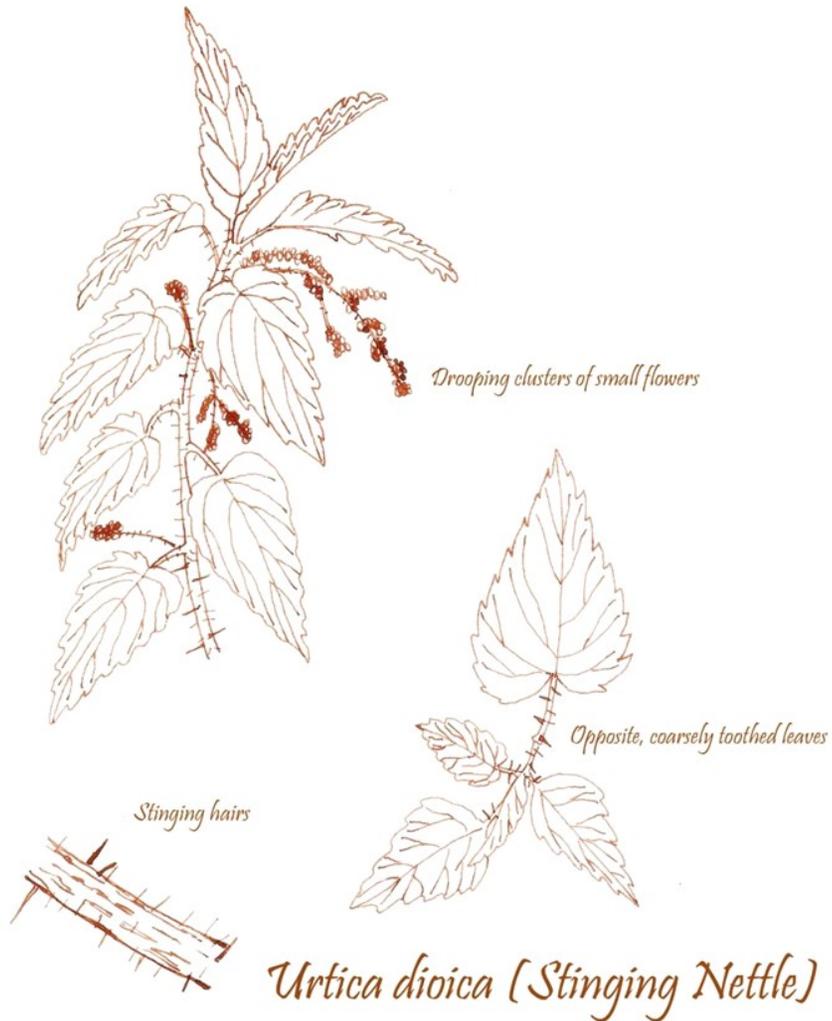


*Alternate, narrow lance-shaped leaves*

### *Epilobium angustifolium (Fireweed)*

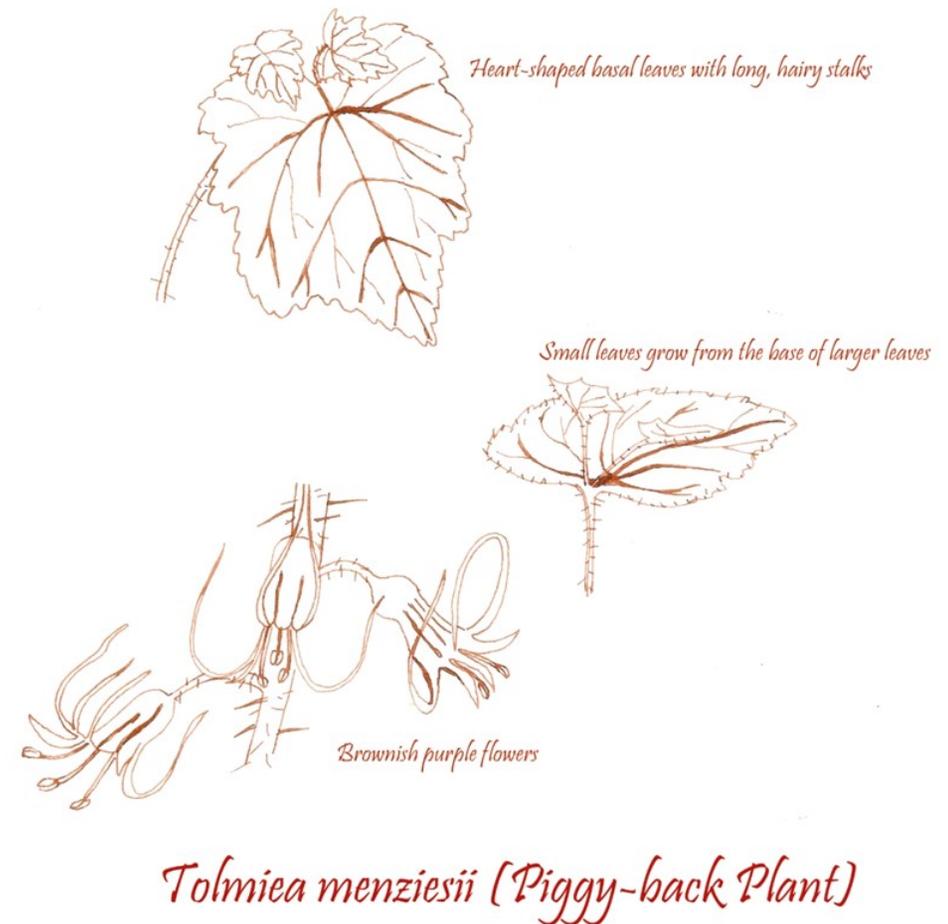
When the pod-like fruit of the fireweed ripens and splits, it releases hundreds of white, fluffy seeds which some native people used for mattress padding. Fireweed thrives in open areas and, like other members of the primrose family, produces flowers with four petals. The nectar from these flowers makes a delicious honey. In addition, fireweed's fibers make excellent cordage and were traditionally used for fishing nets.

## NETTLE FAMILY



A foe to many unaware hikers, the stinging nettle produces many hollow stinging hairs on its leaves and stems. These stinging hairs have a variety of compounds including formic acid which can cause skin irritation. However, when cooked and handled properly, these same chemicals can have powerful medical properties. Nettle fiber was popular with native people for its use in making cordage for fishing nets and snares.

## SAXIFRAGE FAMILY



Piggy-back plant received its name from the unique way that smaller leaves bud from older leaves. Other names for this plant include 1,000 mothers and youth-on-age. This is the only Northwest flowering plant to be used as a houseplant because it can tolerate the low humidity inside the modern home.

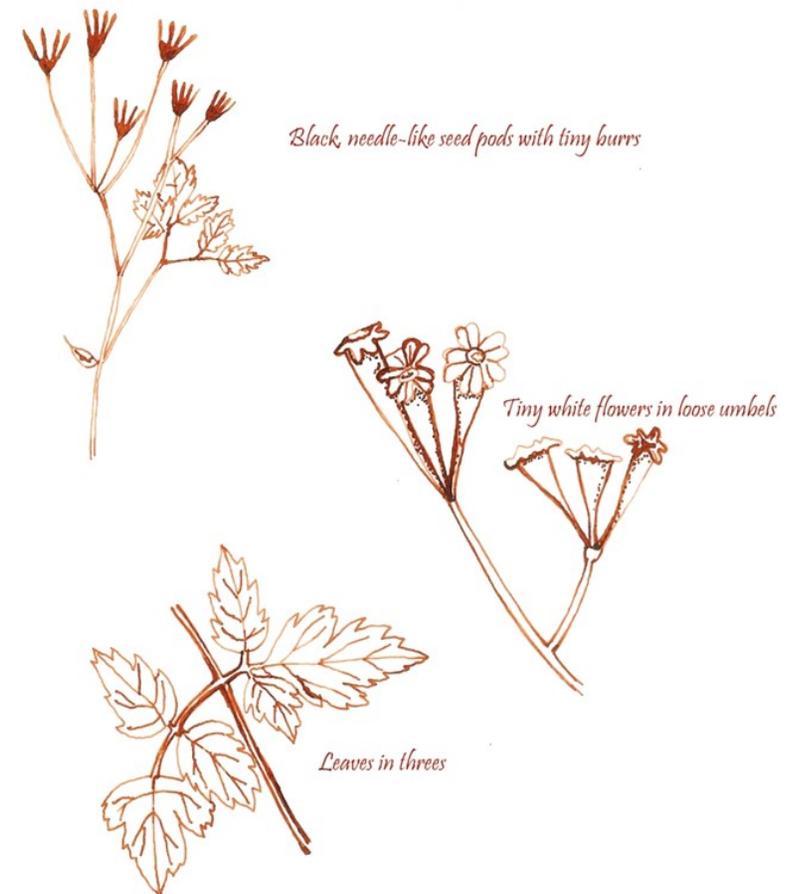
## SAXIFRAGE FAMILY



*Tellima grandiflora* (Fringecup)

Like other members of the saxifrage family, fringecup is characterized by its small leaves and flowers. A common forest plant in Seahurst Park, it gets its name from the finely fringed petals of its flowers which emit a lovely scent to attract pollinators. Folklore claims that woodland elves seek this plant for better night vision.

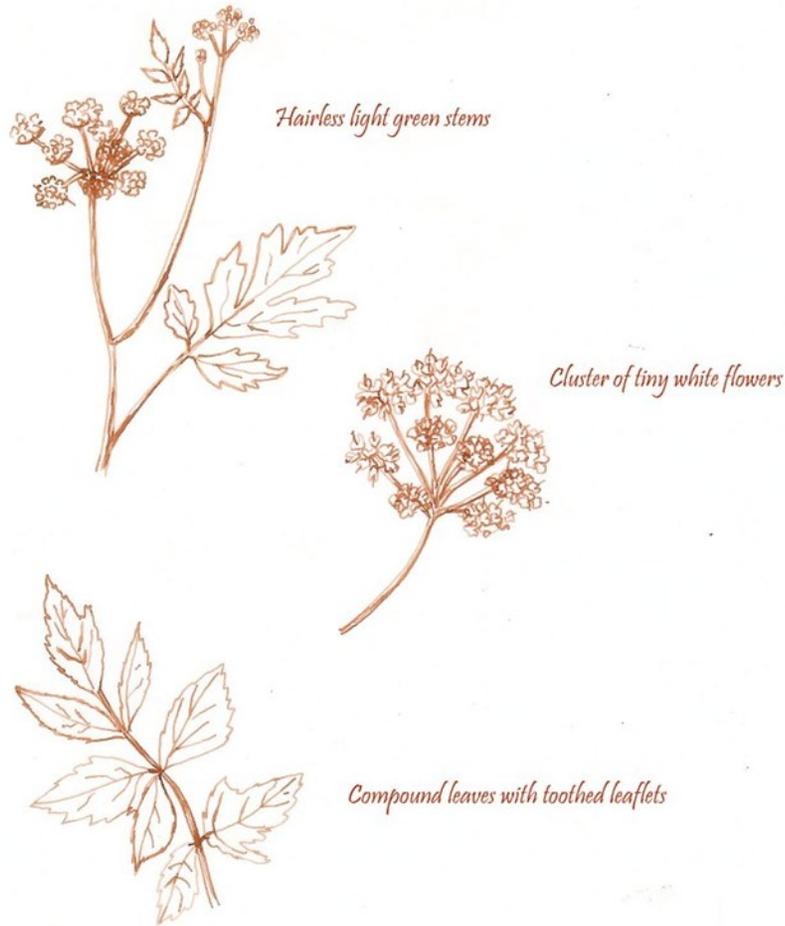
## PARSLEY FAMILY



*Osmorhiza chilensis* (Mountain Sweet Cicely)

Mountain sweet cicely grows well in damp sites where it produces delicate, white flowers in showy clusters throughout spring and summer. This plant emits a pleasant anise smell to attract pollinating insects. Later in the summer, its flowers transform into tiny needle-like burrs which are extremely effective at hitching rides on passing animals or hikers to pioneer new sites in the forest.

## PARSLEY FAMILY



*Oenanthe sarmentosa* (Pacific Water-parsley)

Like other plants of the parsley family, this plant produces its flowers in showy umbels, or flower clusters. Pacific water-parsley is a semi-aquatic plant that thrives in very damp soil providing vital breeding grounds for salamanders and frogs. This plant is closely related to the most toxic plant in North America -- the water-hemlock.

## PURSLANE FAMILY



*Claytonia sibirica* (Siberian Miner's Lettuce)

Also known as the candy flower due to its pink and white flowers, this plant may provide sustenance to hungry or lost hikers. The leaves and flowers are edible as are the potato-like roots. Like other members of the purslane family, Siberian miner's lettuce has two distinct sepals from which its flowers emerge. Several native tribes used this plant as a hair tonic to make their hair shiny and prevent dandruff.

## RARE PLANTS



*White, waxy stems and leaves lacking chlorophyll*



*Bell-shaped flowers*

### *Monotropa uniflora (Indian-pipe)*

This rare plant lives deep in the forest and is easy to identify because it lacks chlorophyll and is a waxy, white color. Indian-pipe cannot perform photosynthesis, so it leaches food from decaying plant debris through a fungus. Once this small pipe-shaped plant disperses its seeds, it dies leaving a scaly, black carcass. Indian-pipe is also known as ice plant, corpse plant, and ghost flower.



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*Illustrations by Luciana Conceição*

*Text by Jennifer Dumlao and Caroline Bobanick*

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## NATIVE PLANTS ARE A PRECIOUS NATURAL RESOURCE

When native plants are endangered by human development or invasive plant species, the birds, insects, and even fish that depend on them can also become threatened. Therefore, preserving native plants in our wild areas and choosing them for our own gardens helps preserve the balance of nature and is good for the health of our environment.