Welcome to the **Pollinator Path**

Here, you'll find native plants and explore their relationships with regional pollinators, and humans. How do you build a relationship with these plants and pollinators? It starts with acknowledging them and the ways we are connected.



Plants and pollinators each impact the other throughout the seasons. Both are essential to our local food systems. Coast Salish people have recognized this intertwined system since time immemorial, acknowledging plants and pollinators through stories and their uses.

The Pollinator Path was developed in partnership with Owen Oliver (Quinault/ Isleta Pueblo).

Audio of Owen Oliver was captured in PacSci's Digital Learning Studio.

Tree trunks provided by the Davey Tree Company.

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Chinuk Wawa names are all around you

You'll see and hear Chinuk Wawa names throughout the *Pollinator Path*. The language is also in regional place names, like:

Alki beach in West Seattle: ałqi means "into the future."

The city of Tukwila: taqwəla means "hazelnut."

Chinuk Wawa, or Chinook Jargon, is a trade language of the Pacific Northwest constructed in the 1800s. It is composed of, but not limited to, Chinookan, Salish, French, and English words. Today, Chinuk Wawa is spoken and revitalized by the Confederated Tribes of Grand Ronde.

Explore more about the

Confederated Tribes of Grand Ronde



Calls to relationship

How can you be an active steward? Answer the calls throughout the path to notice plants and pollinators and develop a personal relationship with them. The *Pollinator Path* serves as an acknowledgement of land.

For example, try learning the Indigenous name of a plant and greet it each time you see it with its name. Next time you see an acorn think of its Chinuk Wawa

name, taqwəla.



Acorn adapted from photo by Walter Siegmund, CC BY-SA 3.0

What is a Pollinator?

Butterflies, moths, bees, bats, and birds are all **pollinators** that support the plants in this garden. Wind and water are pollinators too.

Pollination is the most common way a plant reproduces. A **pollinator** transfers pollen grains from the male part of a flower, the *anther*, to the female part, the *stigma*. This sexual transfer of genetic material fertilizes the plant so it can create seeds the start of new plants.



phil-tatis red flowering current

p^hil-tatis is found in dry, open woods west of the Cascades. They're identified by their bright magenta blossoms in the springtime. The blue, pasty berries are left for the animals—they have a bland taste.



Local pollinator t'sin (hummingbird), specifically the Rufous Hummingbird, is drawn to the brightlycolored p^hil-tatis flowers. The flowers provide nectar as the hummingbird provides a service—pollination.



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Call to relationship

Study p^hil-tatis bloom, either its photo or in the garden if you're standing here in summer. How would you describe the flower? As you describe it, you acknowledge it.

samən-ulali salmonberry

samən-ulali are delicious and can be an abundant food source for people in the Pacific Northwest. The ripening of samən-ulali berries coincides with the seasonal calendar of salmon spawning. The pinkish and purplish flowers that grow orange-red berries make samən-ulali recognizable.





samən-ulali are pollinated by Rufous Hummingbirds and native bees. They flower early in the season, before many butterflies take flight.

Vbrewbooks from near Seattle, USA, CC BY-SA 2.0

Call to relationship

One way to identify saman-ulali from other, similar bushes is to notice the placement of leaves. Look for the shape of butterfly wings, outlined here, when two leaves connect.



isa-x kinnikinnick

isałx, or kinnikinnick, is a small groundshrub. The name kinnikinnick comes from the Northeast Lenape's Unami language. 'këlëkënikàn' means 'smoking mixture' in Unami. The Lenape use kinnikinnick leaves as a smoking mixture, like tobacco.





isałx produces larp (red berries) from pinkish-white flowers that bloom in late spring with the help of pollinators, like the Brown Elfin butterflies, which emerge in February and take flight through July.

Robert Flogaus-Faust, CCO

Call to relationship

There are many Indigenous-named plants around us. salal, a native shrub which is also pollinated by the Brown Elfin butterfly, is a Chinuk Wawa word.

paya-tipsu western wild ginger

paya-tipsu is a groundcover plant that thrives in wet understories. It has a thin root, unlike the thick-rooted ginger in grocery stores. Spicy paya-tipsu continues to be a staple in Indigenous food systems. In Chinuk Wawa, paya means "fire," and tipsu means "plant."





paya-tipsu is pollinated by flies, particularly local syrphid flies, who are attracted to the hairy trilobed flowers that extend with tendrils.

Call to relationship

The ginger you eat from the store is not originally from here. paya-tipsu is our ginger in this region. It is still used for flavor and garnishes. Ginger was, and still is, used by Coast Salish people as an addition to salmon.

phał-tseqw ili?i thi labrador tea

Also known as Labrador Tea, p^hał-tseqw ili?i t^hi has oblong leaves that curl downwards, hiding an orange underside. In bloom, its white flowers stand upright. This medicinal plant promotes a relaxed state and is antiinflammatory. Many Coast Salish tribes continue to manage how p^hał-tseqw ili?i t^hi is harvested.





This plant is pollinated by bumble bees, although it mostly reproduces through rhizomes modified stems that grow horizontally underground.

NPS Illustration / Laurel Mundy

Call to relationship

p^ha¹-tseqw ili?i t^hi is a slow-growing plant. If you harvest it for use, you should only collect a couple leaves. If we picked all its leaves, we wouldn't have enough for the years to come.

shat-ulali evergreen huckleberry

This plant is often found near the shoreline and a bit inland, unlike other huckleberries. Coast Salish people burned prairies to ensure there was no competition for sunlight for the flowering huckleberry bushes.





shat-ulali is a home and food source for the Mariposa Copper butterfly and caterpillar. Adults feed on flower nectar and transfer pollen in the process.

Call to relationship

shat-ulali can be eaten into winter because they stay on the bush longer than other berries.

upqwəna ¹i²il-lefil maidenhair fern

upqwəna [‡]i?il-lefil is recognized by its black stems and fan-shaped blades. Its name means "basket black thread." Northwest Coast people use this fern to add thin, dark lines to basket designs.





upqwəna [‡]i[?]il-lefil do not reproduce through pollination. Instead, they use spores, which contain both male and female genetic material. Spores fall from the frond to the ground, then meet in groundwater.

Robert Flogaus-Faust, CCO

Call to relationship

Can you find the maidenhair fern's black stalk in this Karuk basket? Now look back at the fern in front of you. How does the stalk look different?

k^hul-snas ulali snowberry

k^hul-snas ulali thrive in lowland thickets. They are identified by their green oval leaves and pink bell-shaped flowers which attract many different pollinators birds, butterflies, and bees. Animals help disperse seeds as they munch on berries in the late fall to early winter.

The snow-colored berries have uses though they are inedible for humans. Historically, Indigenous people used the berries as an antibacterial soap.

The Anna's Hummingbird is one of k^hul-snas ulali's many pollinators.

korina.info - CC-BY-SA-4.0, CC BY-SA 4.0

Call to relationship

The berries are white and almost always present. They are especially noticeable in winter when they remain even when the leaves have fallen.

The Three Sisters Story

Three Sisters is a story told since time immemorial. This story highlights Indigenous agriculture practices that are tied to Traditional Ecological Knowledge. The sisters—Corn, Squash, and Beans—are planted together. The Corn shoots high and creates a stalk for Beans to crawl up. Beans provide nitrogen for healthy soil. Squash creates shade with large leaves, which slows

dirt from drying. They all work together. The sisters wouldn't be as strong or bountiful without each other.

Summer Tyance (Anongkwe) Niswi Nishimeyag (Three Sisters)

Digital print of acrylic painting 2020

Acknowledging the cycles of life

Traditional Ecological Knowledge (TEK) recognizes that life is cyclical in nature. Plants, animals, and humans are all connected through their relationships to one another. TEK is connected with being good stewards for plants and animals. To practice this, we bear witness to and acknowledge the cycles, and share the benefits of pollinators and plants.

> Indigenous stories provide 'original instructions' for how to care for

and relate to the land; the nature of reciprocity, exemplified by our relationship to plants [and animals].

—Dr. Gregory Cajete (Santa Clara Pueblo)