



## **WSÁNEĆ ETHNOBOTANY TRAIL & RESTORATION PROJECT** **at the** **Horticulture Centre of the Pacific** **Annual Report 2020**

The WSÁNEĆ Ethnobotany Trail & Restoration Project is a partnership project between the PEPÁKEN HÁUTW Foundation and the Horticulture Centre of the Pacific (HCP). Located at HCP, this project is an amazing opportunity to educate visitors, students and community members in WSÁNEĆ territory about the cultural and ecological importance of native plants and ecosystems. The foundation for this project is the deep acknowledgement of WSÁNEĆ knowledge keepers past and present who have stewarded these native plants and ecosystems since time immemorial. We intend to foster connections between the WSÁNEĆ community and this special place in their homelands, named HELENIKEN in SENĆOTEN to honour the headwaters of many tributaries in this area. It is our belief that the development of these connections can support a greater respect and understanding for WSÁNEĆ culture and history from settlers and visitors to this territory, as well as affirm the resiliency and vibrancy of WSÁNEĆ culture.

This project also emphasizes the incredible amount of work that has been accomplished in the natural areas at HCP and provide the space to raise awareness about the role that functioning native ecosystems have to play in mitigating ecological challenges. The project area consists of diverse and unique ecosystem types which offer a chance to explore important topics such as hydrology, ecological trail building, extirpated species regeneration, persistent invasive species removal, and the restoration of ecosystems that are likely to extend their ranges into our region due to climate change.

### *Background*

The WSÁNEĆ Ethnobotany Trail & Restoration Project is located at the Horticulture Center of the Pacific, in the Douglas fir biogeoclimatic zone. The natural area currently under the purview of this project consists of a forested area, wildflower meadow demonstration garden, a lakeside wetland, a pond, and a swale ecosystem. Specific environmental conditions for the project area can be found in the HCP Restoration Plan (Berch & Holcomb 2008).

The first WSÁNEĆ Ethnobotany Trail was in place though the former Harvest Woods from 2009-2012. During this time the trail won a Conservation Award from the municipality of Saanich and received positive engagement from HCP visitors and students. Upon the dissolution of the trail due to disruption from septic tank installations, remaining members of the Harvest Woods

volunteer group and the WSÁNEĆ Ethnobotany Trail volunteer group made plans for the development of a new series of connected ethnobotany trails throughout the HCP property, to be implemented in phases (The Ethnobotany Trail at HCP, Arney 2014). Due to ongoing concerns at that time, plans for this trail were suspended in 2014.

Between 2014 -2019 Hoke Holcomb has continued to do restoration work in the areas previously designated for the ethnobotany trail, in particular the wetland area adjacent to the lake, frequently referred to as the ‘Waterfront’ in his extensive planning documents. Jane Hunter, former Harvest Woods volunteer, has shifted her efforts to a section of the former Harvest Woods to develop and steward the Garry oak Meadow Flower garden which is growing quite successfully.

In 2019, the partnership between the Horticulture Centre of the Pacific and the PEPÁKEN HÁUTW Foundation was created and a contract developed to revitalize the former WSÁNEĆ Ethnobotany Trail, create educational opportunities for PHC students and HCP visitors, and plan for the trail’s expansion over successive years. PHC student and HCP volunteer groups all contributed to an impressive clearing and cleanup of the Phase One section of the trail. PH crew member and artist Sarah Jim began designing signage for the plants along this first section of trail, and a pamphlet was initiated to support HCP visitors taking a self guided tour of the trail (see 2019 Work Summary in the WSÁNEĆ Ethnobotany Trail & Restoration Project report, submitted to HCP Dec 2019).

### *Objectives*

Trail: Our immediate objective and first phase of the project includes the restoration of the former Harvest Woods and maintenance of a trail system which connects to the Garry oak Meadow Flower garden. The second phase of the project will be to address the wetland areas and mitigate persistent invasive species and hydrology concerns to extend the trail along the waterfront from the first section of the new trail. The third phase of this project will link the trail to the pond and swale (located west of the formal gardens perimeter fence). The fourth phase of this project will be to examine further aspects of connectivity that are possible throughout the HCP property, for example to create a loop which includes the Garth Homer Woods and Native Plant Demonstration Garden or to connect the trail to the larger Conservation Area.

<b>WSÁNEĆ Ethnobotany Trail</b>	
Phase One	Forest and Meadow section (former Harvest Woods)
Phase Two	Wetland section (Willow Waterfront Trail)
Phase Three	Pond and Swale section (connecting wetland to swale)
Phase Four	Connectivity (linking the trails)

(for full description of all phases, please see the WSÁNEĆ Ethnobotany Trail & Restoration Project report, submitted to HCP Dec 2019).

Education: Aside from the physical development of these trails, we also have the objective of deepening education and awareness about native plants, ecosystems as well as WSÁNEĆ culture and their long history of land stewardship at HELENĪKEN and throughout WSÁNEĆ territory. Each new section of trail will include signage and a pamphlet so visitors can do a self guided tour to learn more about this important element of each trail section. We also intend to foster opportunities for WSÁNEĆ community members to share knowledge though paid tours of the trail or community events at HCP, and it is our hope that WSÁNEĆ people will feel increasingly interested and comfortable returning to HELENĪKEN as a place to gather foods, materials and medicines.

## 2020 Work Summary

The 2020 Work Plan as described in our 2019 Annual Report was significantly altered due to the covid19 pandemic. The trail opening celebration in April was cancelled and the sign shop where we commissioned the signs to be made was closed for over two months, and quite backlogged with orders upon reopening. However, we were able to accomplish some of our objectives and finish the year with some beautiful results.

### Signage



The trail signs designed by Sarah Jim are quite remarkable and have already attracted a good deal of attention to the trail since their installment in October 2020. In future we would be unlikely to use AlleyKat signs again, as many of the first batch of signs they produced actually fell off their stakes while installing them during our first “soft” opening in late September, and

their method of charging for their work was somewhat unclear in terms of fixing these signs. Fortunately the final result was quite lovely and so, despite these issues, we now have a gorgeous set of plant signs leading visitors through the trail!



### Pamphlet

The pamphlet we produced to operate in tandem with the plant signs, leading visitors on a self guided tour through the Phase One section of the trail. The pamphlet includes information on the SENĆOŦEN names of plants with sings along the trail, as well as the pronunciation of these names and some of the characteristics of these important native plants. PEPAŦIYE Ashley Cooper, Sarah Jim, Judith Lyn Arney and Jacqueline Jim all contributed to the development of this pamphlet, which was finalized for distribution by HCP in October. This pamphlet can be found at the HCP main office and enjoyed by all PHC students and HCP visitors.

**LÁMTEN (lame-ten)**  
Red Columbine | *Aquilegia formosa*  
This name comes from our neighbours from Quw'utsun Territory. It can translate to "something that looks after you and guides you".

**KEXMIN (kh-uh-mean)**  
Desert Parsley | *Lomatium nudicaule*  
This plant has a very spiritual and sacred role to the WSÁNEĆ. It grows in dry sandy places, and is still harvested and used. Please protect this plant when you see it in parks and growing in the wild.

**ĆEN,ÁLĆ (chung-ae-th-ch)**  
Garry oak | *Quercus garryana*  
An iconic tree in an extremely rare, diverse, and important coastal ecosystem, the KŁO,EL (camas) meadow. Acorns can be used as food once it is properly leached. A protected tree in this region.

**KŁO,EL (q-thuh-el)**  
Common Camas | *Camassia quamash*  
The bulb of this flower is an important starchy food that has sustained the WSÁNEĆ since the beginning of time, growing in beautiful meadows.

**KÁTELĆ (kay-ts-eh-th-ch)**  
Oceanspray | *Holodiscus discolor*  
This is an indicator plant for the WSÁNEĆ related to salmon. The "iron" wood from the thick branches are used for many tools and knitting needles.

**TŦÁ,ÉLĆ (ts-the-eh-th-ch)**  
Bigleaf Maple | *Acer macrophyllum*  
The wood from this tree is used for canoe paddles, spindle whorls, handles, and other various tools. A spiritual tree which calms the mind.

**JESIP (ti-uh-seep)**  
Licorice Fern | *Polypodium glycyrrhiza*  
Grows with moss preferably on trees or rock. The roots has a medicinal use for sore throats.

**TELIKÉLP (ti-ugh-lee-kwu-th-p)**  
Yarrow | *Achillea millefolium*  
Wonderful plant for pollinators. The leaves and flowers are used for teas, oils, and salves for healing inside an out.

**KEKILĆ (qwh-qwh-ee-th-ch)**  
Arbutus | *Arbutus menziesii*  
Translates to 'the drinking tree' since its roots can find water in the driest of places. A very sacred tree featured in the WSÁNEĆ flood story.

This trail was made possible by the partnership between the Gardens at the Horticulture Centre of the Pacific and the PEPAŦEN HÁUTWY Foundation.

**PEPAŦEN HÁUTWY**  
www.pepakim-hautwy.com  
Native plant art by Sarah Jim Studio

**TEXEN,ILĆ (ts-ugh-wung-eeth-ch)**  
June Plum | *Chenidia carolinensis*  
This is an indicator plant and lets us know when spring is on its way. Leaves and berries are edible, and great first food for birds.

**YIYEXEM (yuy-ye-kh-um)**  
Evergreen Huckleberry | *Vaccinium ovatum*  
A sweet berry growing low to the ground in the forests.

**JSÁY (j-say)**  
Douglas Fir | *Pseudotsuga menziesii*  
The bottle brush needles of this tree contain vitamin C and the sap used as disinfectant for wounds.

**SEKÁÁN (suh-cane)**  
Bracken Fern | *Pteridium aquilinum*  
Root can be pounded into a flour.

**PEPKIYOS (pup-key-yos)**  
Snowberry | *Symphoricarpos albus*  
This shrub is a favorite among pollinators and birds. Its berries are not edible to humans, although it has cultural and spiritual uses.

**ELIE,ILĆ (uh-leel-ee-th-ch)**  
Salmonberry | *Rubus spectabilis*  
Salmonberry shoots and berries are a staple food source for WSÁNEĆ.

We encourage you to plant native plants in your yard to create native ecosystems in the spirit of reciprocity to the land. Thank you for your wild harvesting.

**DEKEN,ILĆ (duh-kwung-ee-th-ch)**  
Thimbleberry | *Rubus parviflorus*  
The fresh shoots and berries are edible and a staple food. The leaves can be folded to make a cup to hold your berries in.

**TEX,TEX (ts-uh-kh-ts-uh-kh)**  
Stinging Nettle | *Urtica dioica*  
A beloved and versatile plant that is medicinal, edible, and used for fibre to make cordage, nets, weaving, and has spiritual uses.

**SKELÁLNEW,ILĆ (squl-lay-nghoo-ee-th-ch)**  
Trailing blackberry | *Rubus ursinus*  
Delicious native blackberries are full of flavour and very nutritious. This is another spiritually significant plant to the WSÁNEĆ.

**KÁMŦ,ILĆ (ghame-q-ee-th-ch)**  
Wild Black Gooseberry | *Ribes divaricatum*  
These berries are traditionally used in a fruit cake often paired with salal. The thorns can be used as needles/tweezers. Roots were used in the reef net.

**KELKE,ILĆ (gul-k-gu-ee-th-ch)**  
Nooka Rose | *Rosa nutkana*  
The generous rose shrub provides food, medicine, and fibres. The roots of the shrub were used in making the reef net.

**STXÁLEM (s-th-kh-ale-um)**  
Swordfern | *Polystrichum munitum*  
Its large fronds are used in traditional pitcooks.

**SQEL,QELEX (squl-qui-ekh)**  
Rattlesnake Orchid | *Goodyera oblongifolia*  
The name translates to 'its got spots'. Spiritual plant that is used for protection. Is used for medicinal purposes.

**SREKĆES (skuh-ekw-ch-us)**  
Red Huckleberry | *Vaccinium parviflorum*  
Delicious berry often seen growing out of stumps.

**SENI,ILĆ (sun-ee-eh-th-ch)**  
Oregon Grape | *Mahonia aquifolium*  
These tart berries are edible and medicinal. The inner bark is used for natural dye.

**TI,ILĆ (tye-ee-th-ch)**  
Yerba Buena | *Satureja douglasii*  
Delightful native mint and very good for tea.

**WIWŦ,ILĆ (wee-wu-q-ee-th-ch)**  
Red Flowering Currant | *Ribes sanguinalis*  
This is an indicator plant and lets us know when winter is ending and to get ready for spring. A must have for supporting pollinators.

**the gardens at HCP**  
www.gardensat.hcp.ca

**PEPAŦEN HÁUTWY**  
www.pepakim-hautwy.com

Native plant art by Sarah Jim Studio

Forest Ecosystem | Meadow Ecosystem

## Trail work

Although much intensive clearing of the larger Harvest Woods section was completed in autumn 2019, the trail does require ongoing maintenance to remove and eventually eradicate some of the invasive species throughout the section and the trail specifically. The Garry oak Meadow Flower Garden section of the trail is maintained very well by Jane Hunter and GOMF garden volunteers, however the wooded section of the trail has no official volunteer group. Once the risks involved with the covid19 pandemic have passed, PEPÁKĒN HÁUTW will initiate regular student and volunteer days throughout the year to accomplish this task. This year, Judith and Sarah did much of the trail clearing work prior to the soft opening in September, and in October we were joined by an amazing PHC student group (coordinated by PHC college administrator Jessica Lokker), who finished clearing most of the trail and added a fresh layer of woodchips (provided by HCP Head Gardener Linda Petite) through the forest section of the trail. We also planted some TEX, TEN (stinging nettle, *Urtica dioica*), which was propagated at the PEPÁKĒN HÁUTW nursery over the spring and summer. Trail work is also coordinated with Jane Hunter so that the GOMF section of the trail is supported in conjunction with the larger trail network.

## Education

We hope that some of our educational objectives are met with the presence of the new pamphlet and signage along this first section of trail. We are also excited to work with PHC students to grow awareness of the importance of native plants and ecosystems as well as W̱SÁNEĆ culture and teachings. We were very happy to offer such an opportunity for the PHC students that worked with us in October; once some trail work was completed, Tsawout elder and PEPÁKĒN HÁUTW staff member Earl Claxton Jr led a tour of the trail sharing his incredible knowledge on the plants and many W̱SÁNEĆ teachings along the way. Earl's walk was very well received and we look forward to creating similar opportunities in future!

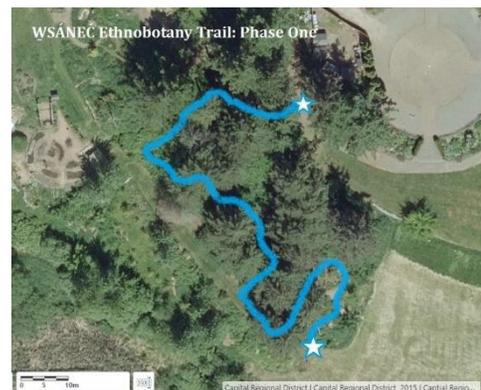


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## 2021 Work Plan: Phase One & Three

In 2021, we hope to continue to improve the section of trail we describe in Phase One, and also to start research and planning into Phase Three. After discussion with HCP Executive Director Deborah Donahue, we have decided to skip over Phase Two for the time being, until we have a clearer picture of the various stakeholders in this section of trail and can meet with staff from the District of Saanich and others without the restrictions now necessary due to the covid19 pandemic.



Developing Phase One of the trail in 2021 will include further maintenance work and education opportunities such as those we were able to accomplish in 2020, as well as the possible extension of this trail to a small area directly adjacent to the current trailhead, as suggested by Hoke Holcomb and Shannon Berch. This area would be planned to provide access to some representative native plants for elders and others who may not be able to physically walk the sloping and sometimes rugged terrain of current and planned sections of the trail. This would be an ideal opportunity to work further with PHC students and develop a plan for mobility access here and perhaps in other areas of the Gardens at HCP.



Phase Three of the WSÁNEĆ Ethnobotany Trail would lead visitors toward the pond currently located outside the western fence near the student toolshed and Head Gardener's office. The three small stars on the map indicate three potential trailheads for the start of this trail. We could have a trailhead at the location just outside the gate or further along the service road closer to the swale. Regardless of its start point, the trail will provide some view of the pond and the many interesting biota there before linking to the bottom section of the swale and following along the swale. The swale is a unique ecosystem, more common in similar ecoregions further south, and therefore has a great potential to support educational discussion regarding ecological restoration and climate change.

The work involved in restoring this area will be invasive species removal and further research into this ecosystem type to determine suitable plantings. Hoke Holcomb will be advising on this as we move forward as this swale was originally installed by him in 2007. We are currently compiling the research done by Hoke and HCP students on the swale to incorporate into our planning in this area.

## HÍSŪKE SIÁM!

by Judith Lyn Arney  
PEPÁKĚN HÁUTŪ Foundation  
December 15 2020