

### INTRODUCTION

The south Salish Sea watershed was so abundant that the south Coast Salish had one of the only sedentary hunter-gatherer societies that has ever existed.

The term Coast Salish groups together people from many different communities along the coast of the Salish Sea, including present-day southern British Columbia, Washington, and northern Oregon. Traditionally, people identified themselves according to their family relationships and the villages where they lived. Language varied from place to place, although all belonged to the Salish family of languages. Local Vancouver First Nations with overlapping land claims: Musqueam, Tsleil Waututh and Sechelt.

During winter, many families would come together in large villages where wooden plank houses were constructed. Some of these structures were small single family dwellings. Other, very large buildings, were the site of ceremonies and community feasts.

Each spring, people left the villages for summer camps and resource sites to gather and process various plant, animal and marine food sources. Sometimes they took the planks from the winter houses, lashed them across two canoes, and transported them to their summer homes. Corner posts and rafters were permanently constructed at both winter and summer villages, enabling the easy reassembly of the house.

In addition to their dietary importance, plants played central roles in the social systems of Northwest Coast peoples, from the marking of seasons to the organization of labor, and the maintenance of relationships to ensure access to important foods. The harvest and stewardship of plant resources fell primarily to Northwest Coast women, so the study of people-plant relationships is also the study of women's contributions to social well-being.

**Coastal Salish Food and Cooking:** The rich Northwest coast environment provided a variety of foods for the native inhabitants. Fish, along with land and sea mammal meat were the principal foods. This diet was supplemented with shellfish collected from the beaches and plant foods such as berries, fern roots, and camas bulbs.

There were several methods of cooking these foods. Boiled meals were heated in water-tight wooden boxes or baskets by means of heated stones, which were lifted from the fire with wooden tongs and dropped into the container. A second method was steam cooking, using large shallow pits lined with hot stones. Food was placed on the rocks, covered with leaves and mats, and soaked with water to produce steam. Fish and meat were also roasted over the open fire, baked on beds of coals, or dried for future consumption.

The main meal of the day was prepared in the late afternoon, although food was available for snacks at any time. Each meal usually included two main dishes – a boiled liquid food serve in a wooden bowl and eaten with spoons, followed by meat or fish, served on small cedar bark mats and eaten with the fingers.

Before Europeans arrived and introduced cloth, most coastal people wore minimal clothing. Men went naked when weather permitted and women would wear a simple skirt made of shredded cedar fibre. Both sexes wore woven bark capes and spruce root or cedar hats as a protection from the rain. Wool from mountain goats and dogs (now extinct) was sometimes woven with plant material.

## VanDusen WALK

### A. Rain Pond

1. Tule: *Schoenoplectus acutus* -, mats, baskets, clothing (~200 = small mat)
2. Basket Sedge, 3 corner sedge: *Schoenoplectus americanus* (Scirpus) basketry,
3. Bulrush: *Typha latifolia* Rhizome = starchy, Down - stuffing and cradle lining,

**B. 'Nootka'** - What's in a name? On Aug. 8, 1774, the Spanish ship *Santiago*, under Juan Pérez, entered and anchored in the inlet but did not land. Natives paddled to the ship to trade furs. Pérez named the entrance to the Sound *Surgidero de San Lorenzo*. In March 1778, Captain James Cook entered the same inlet, named it "King George's Sound". He recorded that the native name was *Nutka* or Nootka, apparently misunderstanding his informant who may have been explaining that they were on an island (*itchme nutka*, a place you can "go around"). The earlier Spanish and British names for the Sound swiftly went out of use.

When Esteban José Martínez arrived in 1789 he gave Nootka Sound the name *Puerto de San Lorenzo de Nuca* and established at Friendly Cove Santa Cruz de Nuca, the only Spanish settlement in what is now Canada. This was the first European colony in B.C. and existed until 1795 when it was abandoned following the Nootka Crisis that almost led to war between Britain and Spain and also played a role in the French Revolution.

1. Nootka Rose (*Rosa nutkana*) - resistant to mildew & black spot
2. Yellow cedar - (*Xanthocyparis nootkensis*) / (*Cupressus nootkatensis*) is one of the parents of the hybrid Leyland cypress; the other parent, Monterey cypress.

**LEGEND:** *Nootka* - origins of the Nootka cypress. A raven encounters three young women drying salmon on the beach. He asks the women if they are afraid of being alone, if they are afraid of bears, wolves, and other animals. Each woman responded "no". But when asked about owls, the women were indeed afraid of owls. Hearing this, the trickster raven hid in the forests, and made the calls of an owl. The terrified women ran up the mountains, but turned into Nootka cypress trees when they were out of breath. According to the Nootka, this is why Nootka cypress grows on the sides of mountains, and also why the bark is silky like a woman's hair, the young trunk is smooth like a woman's body.

### C. Bog area

1. Devil's Club (*Oplopanax horridus*) charcoal = black paint, inhibit acute myeloid leukemia
2. Skunk cabbage (*Lysichitum americanum*) - Used in cooking

### D. Grass Bank

1. Camassia (*Camassia quamash*, *C. leichtlinii*) - Bulb important food, also used in trade.

### E. Beside Livingstone Lake

1. Salmonberry (*Rubus spectabilis*)
2. Thimbleberry (*Rubus parviflorus*) - edible

### F. Douglas Fir grove (*Pseudotsuga menziesii*)

1. Douglas fir cone legend/story (Mice hiding from fire)- (ask each other)
2. Wild Lily-of-the-Valley (*Maianthemum*)

**LEGEND:** Coast Salish - Stanley Park & Rock sculpture (Appendix 1.)

**G. Western Red Cedar** (*Thuja plicata*) - uses, bark collection, (Appendix B.)

### H. Cynthia's area - (Appendix A.)

Vanilla leaf, Salal, Oregon grape, Wild currants (*Ribes*),

## First Nations Plant Use - HLM

### I. Totem Poles - <http://vandusengarden.org/wp-content/uploads/2015/02/Art-in-the-Garden-SGT-gr-3-7.pdf>

#### First Nations: Traditionally an oral society

Stories were told as entertainment to pass along local or family knowledge and also more formally, in ceremonies such as potlatches, to validate a person's or family's authority, responsibilities, or prestige

Some stories are told only during certain seasons, at a particular time of day, or in specific places. Stories often teach important lessons about a given society's culture, the land, and the ways in which members are expected to interact with each other and their environment. The passing on of these stories from generation to generation keeps the social order intact. As such, oral histories must be told carefully and accurately, often by a designated person who is recognized as holding this knowledge. This person is responsible for keeping the knowledge and eventually passing it on in order to preserve the historical record.

Traditional poles are emblems of individual families and clans. They tell about family and clan relationships, accomplishments, adventures, rights and stories. The crests belong to a family and tell its story. The story may be a myth or a legend, or it may be a story from the life of a person honoured by the pole. **Myth Age** - when animals or supernatural beings transform into humans or have human like qualities or where people become animals or superhuman. The crests on a totem pole belong to a family and tell its story. The story may be a myth or a legend, or it may be a story from the life of a person honoured by the pole.

#### A. Mosquito (left) by Earl Muldoe (Gitskan)

**LEGEND** *Origin of mosquitoes, coming from the ashes of the funeral pyre of Baboudina, Chief of the blood sucking mosquito peoples (top). Below him is the young woman (middle) who killed the chief and saved her husband (bottom) and baby.*

#### B. Al of the Gispuwada (right) by Arthur Sterritt (Gitskan)

**LEGEND** *A long time ago, a man went into the mountains to hunt mountain goats and was captured by a black bear that carried him back to his den. Instead of killing the hunter, the bear taught him many things, including how to catch salmon.*

*Two years later, the man was allowed to return home, but by then he looked like a black bear and his fellow villagers feared him. Luckily, a wise old shaman recognized the man and took him in. The shaman rubbed medicine on the bear-man until he returned to his human form.*

*The man and the black bear remained friends, and the bear helped the man if he was in trouble. The man shared his knowledge learned from the bear with his clan, such as how to catch salmon - a skill the people have excelled at ever since. Because of this unique relationship with the bear, the clan took the bear as their crest symbol.*

*At the top of the pole is the man who went to hunt mountain goats; the face is the wise old shaman who helped him when he returned to the village, beneath is the hunter in the form of the bear, the man's head between the paws represents the human side of the bear-man.*

**Appendix 1.**

**LEGEND: A Squamish Legend about Stanley Park** (shortened version)

*The Sagalie Tyee (God/the Great Spirit) has His own way of immortalizing good and evil. Most often, the Sagalie Tyee transforms good people into trees, so that after death they may go on forever benefiting mankind. They may yield fruit, give shade and shelter and provide unending service to the living. They enrich, nourish and sustain; no evil is produced by trees.*

*But people who are wilfully evil, and have no kindness in their hearts, the Sagalie Tyee turns them into solid stone that will harbour no growth, not even that of moss or lichen. These transformed stones contain no moisture, just as their wicked hearts lacked the milk of human kindness and they will support no living thing. The one famed exception, wherein a good man was transformed into stone is **Siwash Rock**. Be sure to notice the tiny tree and other living things on this monument. The tree is there to show that the good in this man's heart kept on growing even when his body had ceased.*

*A long time ago there was an evil witch-woman who went up and down the coast casting her evil eye on innocent people bringing upon them untold disasters and diseases. She delighted in spreading "Bad Medicine" that was the seed of every evil that could befall mankind. This witch woman was immune from death.*

*In his high heaven the Sagalie Tyee wept with sorrow for the anguish she caused but he could not kill her. Instead he gave command to his Four Men (always representing the Deity) that they should find this witch-woman, turn her into a stone and enchain her spirit in the centre of the stone so that the sorrows she caused might never again plague mankind.*

*The Four Men entered their giant canoe and headed towards what is now known as Prospect Point. When they got close to the cliffs they heard above them a laugh, and looking up they saw the witch-woman jeering defiantly at them. They landed and, scaling the rocks, pursued her as she danced away, calling out to them sneeringly: "Care for yourselves, oh! men of the Sagalie Tyee, or I shall blight you with my evil eye. Care for yourselves and do not follow me." On and on she danced through the thickest of the forest. On and on they followed until they reached the very heart of what we now know as Stanley Park. Then the tallest, the mightiest of the Four Men, lifted his hand and cried out: "Oh! woman of the stony heart, be stone for evermore, and bear forever a black stain for each one of your evil deeds."*

*As he spoke the witch-woman was transformed into a bare, white stone, which is still shunned by moss and lichen and all living things, but over which are splashed innumerable jet-black spots that have eaten into the surface like an acid. In this stone, her soul is imprisoned, to this day, and this stone lies somewhere deep in Stanley Park.*

*The Four Men, fearing that the evil heart imprisoned in the stone might still work destruction, said: "We will place nearby something good and great that will always be more powerful than this evil." So they chose many good, benevolent people and transformed their souls into the stately group of "Cathedral Trees" (cedar trees) that still guard us from evil.*

Reference: <http://www.firstpeople.us/FP-HTML-Legends/TheLureInStanleyPark-Squamish.html>

## First Nations Plant Use - HLM

**Appendix A. Some plants of importance to First Nations** - References: "Traditional Plant Foods of Canadian Indigenous Peoples: Nutrition, Botany and Use" By Harriet V. Kuhnlein, Nancy J. Turner & "Plant Technology of First Peoples in British Columbia" Nancy J. Turner

There are obviously many, many more plants and trees that were utilized by local First Nations. Below are some of the ones that can currently, or hopefully will soon be found at VanDusen Botanical Garden.

Tule, Round Stemmed Bulrush ( <i>Schoneoplectus acutus</i> )	An very important mat making material also used for screens, temporary shelters and insulation. It takes about 200 stems to make one small mat.
Common Cattail, Flat Bulrush ( <i>Typha latifolia</i> )	Sometimes called "Cossack asparagus," cattail is widely known for its edible shoots, rhizomes, and flower spikes. Leaves widely used as a mat-making material. Fuzz used for diapering and stuffing.
Common horsetail ( <i>Equisetum arvense</i> )	Spore-bearing and sterile shoots eaten by Northwest Coast peoples; <b>WARNING:</b> Horsetails are known to be toxic to livestock. However, there is no evidence that giant horsetail caused any problems for Indigenous People in the quantities used and at its young growth stage when normally eaten.
Sword fern ( <i>Polystichum munitum</i> )	Rootstocks dug in winter, cooked and eaten with grease or salmon eggs by several Northwest Coast groups; regarded as "famine food"; fronds used as "place-mats" and to line steaming pits
Bracken fern ( <i>Pteridium aquilinum</i> )	The major traditional food use of bracken is the carbohydrate-rich rhizomes, which were dug and eaten by virtually all coastal groups. The rhizomes were baked and pounded into "flour". <b>(POSSIBLY CARCINOGENIC AND TOXIC)</b>
Western Skunk-Cabbage, or Yellow Arum ( <i>Lysichitum americanum</i> )	the large, waxy leaves in various aspects of food preparation. They were employed by virtually all Northwest Coast groups like waxed paper, for wrapping food, lining cooking pits, separating foods being cooked together, and drying berries on. They were also used as makeshift plates and folded to make temporary dippers and drinking cups. After cooking, the rhizomes were eaten sparingly—but not the leaves.
Camas ( <i>Camassia quamash</i> , <i>C. leichtlinii</i> )	The bulbs almost always pit-cooked, usually for 24 hours or more. Because most of their carbohydrate is in the form of a long-chain sugar, inulin, which is not very digestible, nor very palatable, long term cooking was necessary to chemically break down the inulin into its component fructose molecules.
Wild Lily-of-the-Valley ( <i>Maianthemum canadense</i> , <i>M. dilatatum</i> )	In spring, the new "folded" leaves of <i>M. dilatatum</i> were boiled and eaten as greens by the Kaigani Haida of Alaska .The berries of both species are edible.
Fireweed ( <i>Epilobium angustifolium</i> )	This plant, especially the young shoots, was widely eaten by Indigenous Peoples. In B. C., the sweetish, succulent inner tissue from the young stems in spring was eaten raw, or sometimes cooked. Some Salish people made tea from the young leaves
Thimbleberry ( <i>Rubus parviflorus</i> )	Berries and sprouts eaten by Northwest Coast peoples. They are a favorite fruit, and were picked in large quantities, dried in cakes, or stored them in ooligan grease

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Salmonberry ( <i>Rubus spectabilis</i> )	Berries and sprouts eaten by all Northwest Coast peoples. Swainson's thrush is associated with ripening salmonberries, and is often called "salmonberry bird." The berries were seldom preserved, since they are quite watery and do not dry well.
*Trailing Wild Blackberry, or Pacific Blackberry ( <i>Rubus ursinus</i> )	Berries eaten fresh or dried by peoples of coastal British Columbia and adjacent areas; leaves, especially red colored ones, used for beverage tea
Tall Oregon-Grape ( <i>Berberis aquifolium</i> ,	The berries are very tart, but were eaten by many Indigenous groups. Sometimes they boiled them to a jam-like consistency and made juice from them. Often the berries were mixed with other, sweeter fruits, such as salal
Salal ( <i>Gaultheria shallon</i> )	Salal berries were undoubtedly the most important traditional fruit of most Northwest Coast peoples. The bushes are often very productive along the coast, and because the berries grow in elongated clusters, large quantities can be harvested quickly and efficiently. They can be readily cooked and dried in cakes, providing a year-round food source. For preserving, they were generally placed in a bentwood cedar box, mashed and boiled by adding red hot rocks until they were jam-like in consistency, then poured into rectangular cedarwood frames set on wilted skunk-cabbage leaves on a rack and placed over a low fire, usually of alderwood, to dry. The dried cakes were stored in cedar boxes, or openwork baskets set on scaffolding.
Bunchberry, Dwarf Dogwood( <i>Cornus canadensis</i> ;	The fleshy drupes of bunchberry are sweet and pleasant tasting, if somewhat pulpy, with a hard seed in the middle. Often they were served at large feasts. Sometimes they were steamed and preserved in a mixture of water and grease.
Vanilla Leaf ( <i>Achlys triphylla</i> )	Dried leaves were used as an insect repellent.
Red Alder ( <i>Alnus rubra</i> )	The sweet, gelatinous cambium and adjacent inner bark tissues were eaten by some Salishan peoples including Sechelt. It was edible only for a short time in the spring. The wood of red alder was the preferred fuel for smoking salmon and other foods, and alder wood was often used for wooden food dishes, because it does not impart strong flavor to the food. Bark was used to obtain a red dye

\* Will be planted at VanDusen by next year.

### Appendix B. Western Red Cedar (*Thuja plicata*)

For more information: 'Cedar Tree of Life to the Northwest Coast Indians' Hilary Stewart

**Cedar** (Reference - copied from: <https://indigenousfoundations.arts.ubc.ca/cedar/>)

There are two native species of cedar trees that grow in the temperate rainforests of coastal British Columbia: Yellow Cedar and Western Red Cedar.

Red Cedar can grow up to 70 metres tall and live up to 1,000 years old. With its lightweight and rot-resistant wood, Red Cedar is the most versatile and most widely-used plant among coastal First Nations. Yellow Cedar bark is softer and more pliable than Red Cedar, so the former is frequently used to make clothing and other fibrous materials, while the latter is used more commonly for architecture and transportation, such as house poles and canoes.

### Harvesting

Both types of cedar are harvested by coastal First Nations to create a variety of implements for daily use and ceremonial purposes. Almost every part of a cedar tree can be used, including the roots, the bark, the wood, and the withes (the smaller, more pliable sub-branches of a tree).

While the process of harvesting cedar will inevitably cause some damage to the tree, harvesters use methods that ensure the survival of the tree as a species. It is traditional practice that before a tree is cut down, the woodcutters will say a prayer and express their gratitude to the tree's spirit. Traditionally, men were responsible for cutting down a tree, which is a time-consuming and laborious process that involves chiselling and heating the tree with red-hot stones to weaken the wood. They would make use of various woodworking tools, which historically included stone adzes and bone drills. The harvesting of cedar bark was typically performed by women. Harvesting cedar bark requires careful skill and knowledge, or otherwise, the tree could be killed from infestation or stunted growth. A harvester would choose a straight, young tree and de-bark only portions of the tree to ensure its survival. As a result, thousands of these harvested trees, with distinctive scar marks, can be found in old-growth forests and some commercial clear-cut forests. These trees, referred to as 'culturally modified', are considered important heritage sites by archaeologists. Under the *Heritage Conservation Act* (1996) in B.C., a forest utilization site containing a CMT created prior to 1846 is protected by law.<sup>10</sup> Today, Aboriginal peoples continue to create new CMTs as part of their cultural and economic activities and still utilize environmentally sustainable methods passed down from their ancestors.

### Uses of cedar

The astounding variety of objects that can be created from a single tree is a testament to a profound cultural interrelationship between humans and plants. The importance of cedar is reflected in tools and everyday objects, but also in ceremonial objects and regalia. This section will explain some common uses and well-known objects created from cedar. However, each culture has developed its own techniques and uses for cedar, and it is important to keep in mind that we provide only a general overview, and this section does not reflect all the complexities and variations that are found among different First Nations.

Starting with the base of the tree, cedar roots can be dried and braided to form cordage for hats and baskets. The Coast Salish used cedar root to create a unique type of coil basketry. With the right technique, a cedar basket can be made watertight and heatproof. As a result, cedar baskets are used as "pots and pans" for cooking and boiling water. Water is heated in baskets using hot rocks, and once it comes to a boil, foodstuffs can be added.

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The withes of a cedar tree are strong, lightweight, and naturally grow in long strands, making them a suitable choice for ropes and lashing. The Kwakwaka'wakw of northern Vancouver Island made three-ply rope for whaling from young Red Cedar. Because of their strength, cedar withes are also used as lashing to make wood and stone weapons, as well as burden baskets for carrying heavy objects. As coastal First Nations did not traditionally use metal nails and bolts, withes were used to lash together roof planks and setting baseboards, a vital part of house construction.

The most versatile part of the cedar is the bark. Bark could be dyed and processed into different types of thread for mats, clothing, blankets, and hats. Kwakwaka'wakw warriors wore protective armour made from bark rope during battle. Like roots and withes, bark is also made into ropes, baskets, and fishing nets. The inner bark of the Yellow Cedar was valued for its softness and absorbability, so women used them for baby diapers and bedding, sanitary napkins, and towels. Expecting mothers gave birth in a pit lined with Yellow Cedar bark to receive the infant. Furthermore, dried bark burned slowly, providing excellent tinder for matches and torches.

Cedar wood is strong, lightweight, and straight-grained, so it is easy to split and carve, and made into totem poles, masks, and longhouses. Coastal First Nations, who depended on fish as the main staple of their diet, developed a wide array of fishing gear from cedar, including canoes, paddles, hooks, spears, and fishing floats. Once caught, fish were preserved in cedar smokehouses or dried on cedar racks. Food can be stored or served in bentwood boxes, which are made from a single cedar plank bent using steam to form four sides. Bentwood boxes, especially those decorated with paint or carvings, were once a valuable trade item along the Northwest Coast. Bentwood boxes could be used to hold all sorts of goods, and they also served as burial boxes for the deceased.

Longhouses formed the central dwelling unit of each village, with large extended families living together under the same roof. Cedar poles formed the foundations of the house, followed by a framework of fluted beams overlaid with cedar roof planks. Carved house frontal poles would occasionally be positioned at the entrance, particularly amongst the Haida and Tlingit. These poles typically depict the crests and lineage of a family, as well as the hereditary rights and ancestors of the owners. Many First Nations decorated house posts, mortuary poles, and memorial poles with intricate carvings of stylized human figures and animals.

In addition to everyday use, cedar is used for a variety of ceremonial purposes. Families often commissioned a carver to create cedar figures for a potlatch, usually as a welcoming gesture to the guests. Ceremonial dancers' regalia might include head rings, neck rings, wristlets braided from cedar, as well as cedar masks.

### **Cedar and spirituality**

Given the importance of cedar in everyday life, it is clear that cedar also plays an integral role in the spiritual beliefs of coastal First Nations. These beliefs recognize that the cedar tree has its own life and spirit. Coast Salish and Tlingit shamans often had cedar "spirit assistants" or "guard figures" to protect them.

Cedar was also widely valued for its healing abilities. Yellow Cedar bark, which has anti-inflammatory properties, was frequently applied as a dressing for wounds, as a tourniquet, or to ward off evil. Many beliefs and taboos are also associated with the cedar tree. For example, a person who killed a tree through improper harvesting would be cursed by other cedar trees. Similarly, some believe a pregnant woman should not braid baskets, lest the umbilical cord would twist around the baby's neck. As the cedar is a long-lived tree, some Coast Salish groups ensured a long life for their infants by placing the afterbirth in the stump of a large cedar.

As a plant that has ensured the survival of people for thousands of years, cedar has become a powerful symbol of strength and revitalization. The deep respect for cedar is a rich tradition that spans thousands of years and continues to be culturally, spiritually, and economically important.