#### Introduction

This guide provides general information about the plants in the na'?k'wlamən garden, with a brief description of each plant, their preferred habitats, and the ways in which syilx peoples used them. The plants are listed by their nsyilxcen (Okanagan) name, their English common name, and their scientific, Latin name. The nsyilxcen names were provided by Westbank First Nation elder Grouse Barnes.

While much of the information presented in this guide discusses past uses of the plants, syilx peoples continue to harvest a number of these plants today.

NB: Several of the plants in the garden have been used as medicines. A great deal of knowledge and skill is required to use these medicines safely and effectively. Therefore, it is strongly recommended that no one experiment with these plants without the guidance of a person trained in their proper usage.

# Plants in the na'?k'wulamən garden

#### **GRASSES**

**Nsyilxcen Name**: *tàkwiłp* 

**English Common Names:** Pine grass or Timbergrass

**Latin Name:** Calamagrostis rubescens

Primary Use: technology

# Description

❖ This perennial grass grows from long rhizomes, and has 40 cm long, flat blades that are hairy at the base, and 60 to 100 cm long stems. The yellowish-green inflorescence, or flowering part of the stem, is from 6 to 15 cm long. Along this length is a dense cluster of spikelets, each with one tiny flower, or floret, enclosed within stiff bracts, or modified leaves.

#### Habitat

This grass is common at low to mid elevations throughout the Okanagan region. It can be found in dry locations in meadows and open coniferous forests, and on rocky slopes (Parish et al. 1996:321).

#### Uses

❖ Syilx peoples used this flexible grass was used extensively in technology. Layers of grass were placed over and under food in steaming pits. The grass was also used to line the bottoms of berry baskets and to place over the berries to keep them clean. The leaves were bunched together, trimmed, and tied to a stick to make a beater for whipping soapberries into froth. Sometimes dried leaves were softened by rubbing the blades together and made into insoles for moccasins. The grass blades also could be twisted together to make rope. A more recent use of this versatile grass was to mix it with mud to fill in gaps in the walls of log cabins and as mortar for chimneys (Turner et al. 1980:53-55)

**Nsyilxcen Name:** *tak*<sup>W</sup>*iłp* 

**English Common Name:** Northwestern sedge

**Latin Name:** Carex consinnoides

Primary Use: technology

## Description

❖ The perennial sedge has slender stems that grow from rhizomes to 15 to 23 cm tall. Six to 10 shorter blades of grass, about 5 mm wide, grow at the base of the stems. The leaves are flat and blade-like in appearance. At the tips of female inflorescences are 2 to three spikes with indistinct flowers encased in purplish-red, pouched bracts. The terminal spike is more linear and contains the male flowers.

## Habitat

This sedge is widespread in the Okanagan region and common at low to high elevations. It can survive in both moist and dry open forests, in clearings, and on rocky slopes (Parish et al. 1996:341; Klinkenberg 2017[g]).

## Uses

❖ This grass was used in the same manner as Timbergrass for pit cooking and household purposes. Syilx peoples identify the two species of grasses by the same name, tak<sup>w</sup>ilp (Turner et al. 1980:36).

Nsyilxcen Name: none provided

**English Common Name:** Northern Sea Oats **Latin Name:** *Chasmanthium latifolium* 

**Primary Use:** Ornamental (not a culturally important plant to syilx peoples)

# Description

This is an ornamental grass that grows in upright clumps from 0.6 to 1.5 m tall. Bright green leaves grow up to 20 cm long. The grass exhibits an array of colours throughout the years, which makes it a very attractive addition to the garden. After the first frost, the leaves turn a coppery colour and then turn brown by winter. The seed heads, which droop from thin, slightly arching stems, start out green but become purplish bronze towards the end of summer.

## Habitat

❖ This grass is not native to the Interior region. Nevertheless, it does well in some of the moister areas where it can get an abundance of sunlight and shade (Missouri Botanical Garden 2017[c]).

**Nsyilxcen Name:** sxsìst'iya?

**English Common Name:** Sweetgrass **Latin Name:** *Hierochloe odorata* 

Primary Uses: technology and ceremonial

# Description

❖ This perennial grass grows from 30 to 60 cm tall. The flat grass blades contain the chemical compound coumarin, which gives it a strong, sweet, vanilla-like smell. Seed heads form at the tops of the stems and produce clusters of golden yellow to bronze-coloured spikelets from mid to late summer.

## Habitat

This grass is found at mid to high elevations throughout the Okanagan region in wetlands, such as meadows, and beside marshes and swamps (Parish et al. 1996:338).

#### Uses

- ❖ Braided bunches of the grass were also placed among clothes to give them a pleasant smell (Turner et al. 1980:55).
- ❖ Today, braided strands of sweetgrass are used to smudge for ceremonial purposes.

Nsyilxcen Name: styi?

Common English Name: Bluebunch wheatgrass

**Latin Name:** *Pseudoroegneria spicata* **Primary Uses:** medicine and technology

# **Description:**

❖ This perennial grass grows in clumps up to 150 cm wide. Narrow leaves grow from the base of the plant, are from 30 to 60 cm long. The blades are blue-green in the spring and fall, but brown in summer during their dormant period. Among the grass blades are many stems from 60 to 100 cm tall, the tops of which sprout seed spikes up to 20 cm long.

# **Habitat:**

This grass is common and widespread at low mid elevations throughout the Thompson and Okanagan regions. It is highly drought tolerant and thrives in dry, open forests, grasslands, and on southerly slopes and plateaus (Parish et al. 1996:313; Ogle et al. 2010).

# Uses

- Bluebunch wheatgrass was an important plant for syilx peoples, and the grass was gathered year round. It could be boiled to make a medicinal bath for soaking sore, swollen, or arthritic limbs.
- The dried grass made an excellent fire starting material. Syilx peoples also stuffed the insides of their moccasins with the grass to add insulation against cold winters and wet weather. The insulating properties of this grass made it a good floor cover in the winter houses and it was placed over top other grasses to create a soft, warm layer. The grass was also used to line cooking pits. Layers of this grass also made excellent mats for drying soopalalie berries (*Sheperdia canadensis*).
- ❖ In addition to the usefulness of this plant to syilx peoples, Bluebunch wheatgrass was also an excellent grazing grass for their domestic livestock and deer (Parish et al. 1996:313; Turner et al. 1980:53).

# **PERENNIALS**

Nsyilxcen Name: kwətskwətswixwups English Common Name: Yarrow Latin Name: Achillea millefolium **Primary Uses:** medicine and technology

# **Description**

❖ This herbaceous perennial produces erect stems up to 75 cm tall. The species name millefolium and the nsyilxcen name k™atsk™atswix™ups describe the feathered, fern-like leaves that sprout alternately along each stem. From June to September, composite heads of white to pink flowers grow at the end of each stem in a flat-topped cluster.

## Habitat

❖ Yarrow is widespread and common in the Okanagan region growing from low to subalpine elevations in a range of moist to dry environments, especially in open sites and forests with good sun exposure. It grows particularly well in disturbed areas, such as along roadsides (Parish et al. 1996:116).

## Uses

- Syilx peoples commonly used this white flowering plant for medicinal purposes. The insides of roots were mashed and made into a poultice for toothache. Steeping the roots in warm water made an infusion that was drunk for headache, stomach ache, colds, and diarrhoea. Used externally, this infusion was an effective eyewash and a wash for burns and rashes. Bathing in an infusion made from the whole plant helped ease the pain and stiffness from rheumatism and arthritis.
- Syilx peoples placed the leaves and stems on hot coals to create smoke that kept mosquitoes at bay. The leaves and stems were also mixed with white clematis and branches from dense clusters of shoots found on Douglas fir trees, called the "witch's broom," to make shampoo (Turner et al. 1980:74).

Nsyilxcen Name: *xelíwa* 

English Common Names: Nodding Onion / Wild Onion

**Latin Name:** Allium cernuum

**Primary Use:** food

## **Description**

❖ This plant sends up a single stem, 30 to 45 cm tall, from edible oval bulbs under the soil. At the base of each stem is a spray of grass-like leaves. A cluster of small, bell-shaped pink to rose coloured flowers sprouts at the tip of the stem. Depending on elevation, blooms appear from June to August. The stem of each flower "nods" or bends down in an umbrella-like fashion when the plant is flowering, giving the plant its English name.

#### Habitat

This sun-loving plant is widespread and commonly found at low to mid elevations in dry locations, such as rocky outcrops, grasslands, and in open forests, especially where Douglas fir is found (Parish et al. 1996:296).

# Uses

❖ The bulbs were harvested at different elevations from April to June, before the plant flowered. They were sometimes eaten raw along with the leaves, but more often they were placed in steaming pits and cooked overnight. The bulbs could also be dried and stored for later use by braiding the attached leaves together. Southern syilx peoples used to make

small cakes by pressing the cooked onions flat and drying them. The cakes were later softened with a little water and eaten (Turner et al. 1980:38; Parish et al. 1996:296).

**Nsyilxcen Name:** *tsəmtsəmłk'íx*<sup>w</sup>

English Common Name: Pearly Everlasting

**Latin Name:** *Anaphalis margaritacea* **Primary Uses:** medicine and technology

# Description

This is a single-stemmed, herbaceous perennial, growing up to 90 cm tall, with numerous, narrow, lance-shaped leaves sprouting alternately up the length of the stem. From July to August, the stems are topped with flat-topped clusters of white flowers with small, yellow disk centres.

### Habitat

This plant is common and widespread from low to subalpine elevations throughout the Okanagan region. It can be found in sunny to partly shaded meadows and clearings, in open forests, on rocky slopes, and in disturbed areas, such as pastures and along roadsides (Parish et al. 1996:141).

#### Uses

- Medicinally, this plant was used mainly to aid in stomach problems. For instance, an infusion of the roots and five small shoots was drunk for upset stomach. It has both a laxative and emetic effect, which helps cleanse the body.
- ❖ Because of the lovely smell of the leaves, stems, and flowers, this plant was placed in pillows, among stored clothing, and in baby cradles. Some say that the sweet smell of Pearly Everlasting stayed with the person his or her whole life if the plant was used in the baby's cradle (Turner et al. 1980:75).

**Nsyilxcen Name:** *sxsístya?* (same name given to sweetgrass)

**English Common Name:** Pink pussytoes **Latin Name:** *Antennaria dioica "Rubra"* 

**Primary Use:** Syilx peoples used a different species for ceremonial purposes. See "Uses" below for

discussion.

# Description

❖ This perennial herb forms a low mat, about 2.5 cm high, of small, silvery-grey leaves covered in fine hairs. In late spring, short stalks emerge from which fuzzy, deep pink disk flowers bloom. The entire plant grows from 10 to 15 cm tall and can spread up to 30 cm wide.

## Habitat

This plant is very hardy in dry conditions and does well in areas with full sun, sandy or clay soil, or in rocky locations (Bennett 2005:60).

#### Uses

❖ A very similar species, *Antennaria rosea*, can be found in the wild in the Okanagan region. It has small, spoon-shaped silvery basal leaves that are covered in fine hairs. The disk flowers

range in colour from white, pink, green yellow, and brown. They like dry locations in from low to alpine elevations in open forests. But they also tolerate damp locations along river terraces (Klinkenberg 2017[h]).

Syilx peoples used this variety, which they call *sxsístya?*, for ceremonial purposes. The roots were dried and powdered, and the powder was placed on hot coals to produce smoke. The smoke drove away bad spirits and revived exhausted dancers (Turner et al. 1980:75).

**Nsyilxcen Name:** *sp'its'n* (refers to both the plant and the twine made from bark fibres)

**English Common Names:** Indian hemp / Hemp dogbane

**Latin Name:** Apocynum cannabinum

Primary Use: technology

# Description

❖ 30 to 120 cm tall shrub with smooth, reddish stems, and lance-shaped, yellow-green leaves that turn bright yellow in the fall. From July to August, small, greenish-white, tube-shaped flowers bloom at the ends of the tall stems and the stem branches.

## Habitat

This drought-tolerant plant can be found at low to mid elevations in sunny, dry sites, along roadsides, in open forests and hillsides, and in damp basins (Parish et al. 1996:190).

## Uses

- The bark of *sp'its'n* yields strong, durable fibres from which all Interior First Nations made rope. The stems were harvested in fall (October) when the leaves turn yellow. The hollow branches were split to separate the woody core from the outer bark, and then the fibres were separated from the bark and twined into varying thicknesses of thread or rope for sewing, netting, fishing lines, binding material, twined baskets, and bags. The thread was also used with other materials for clothing, moccasins, and bedding (Turner et al. 1980:73)
- ❖ Because of the strength and durability of this fibre, Indian hemp bark was a high-demand trade item for all Interior peoples from areas in which it grew (Parish et al. 1996:190).

**Nsyilxcen Name:** *skwalsiłmalx* 

**English Common Name:** Kinnikinnick or Kinnickinnick

**Latin Name:** Arctostaphylos uva-ursi

**Primary Uses:** food, smoking, and medicine

# **Description**

❖ A low-growing, evergreen, perennial shrub that may grow to about 30cm tall and spread to 2 m over the ground. The plant has 2 to 3 cm long, dark green, oval-shaped leaves. From April to May, small, pink-tinged white, urn-shaped flowers sprout at the ends of the branches. These produce bright red, apple-shaped drupes, each containing five hard nutlets, or seeds, that ripen from August through September.

#### Habitat

❖ In the Interior, this plant grows well in sandy, well-drained soil on sunny, dry, rocky slopes and in dry forest clearings (Parish et al. 1996:85; Missouri Botanical Garden 2017[a])

#### Uses

- The syilx peoples ate the berries after they ripened in the fall either raw or boiled in soups. They also dried and toasted the leaves, which were smoked like tobacco
- ❖ The stems and leaves were also boiled to make a decoction that was drunk to counteract diarrhoea. This decoction was used externally for sore eyes, as a body wash for skin sores, and as a hair rinse to combat dandruff and scalp irritation. The stems and leaves were also combined with Oregon grape branches and used as a tonic for kidney and bladder problems (Turner et al. 1980:101; Moerman 1999:87-88).

Nsyilxcen Name: none provided

**English Common Name:** Pasture sage / Pasture Wormwood

**Latin Name:** Artemisia frigida

Primary Uses: medicine, technology, and ceremonial

# **Description**

❖ This perennial herb sprouts erect stems from 10 to 40 cm tall, often in clusters that form low-spreading mats. The highly aromatic, camphor-scented, silvery-white leaves that grow along the stems are 5 mm long, divided into a number of segments, and covered in silky hairs on both sides, giving them a feathery appearance. In August, tiny yellow disk flowers bloom in clusters along the ends of the stems.

#### Habitat

❖ This species is widespread and common at low to mid elevations throughout the Okanagan region. It prefers dry open sites, such as rocky sloes, open plateaus, in open Douglas fir and ponderosa pine forests, and in dry grasslands (Parish et al. 1996:143; Missouri Botanical Garden 2017[b]).

## Uses

- ❖ Syilx peoples used this plant for a number of purposes. For medicine, they steeped the a handful of leaves and branches in water to make a strong infusion. This bitter tea was then drunk for colds or flu as it promoted sweating. They also boiled the whole plant in water to make a general tonic that was "good for anything" (Turner et al. 1990:76)
- ❖ Because of the strong scent of this plant, syilx peoples burned pasture sage around racks of drying salmon to repel insects.
- Syilx peoples also used this plant, as well as cq'was'q'lstn (Artemisia tridentata), for ceremonial purposes. They burned the leaves and used the cleansing smoke to smudge, or cleanse, ritual and ceremonial spaces of troublesome energies, and to purify the body as the smoke passes over it (Parish et al. 1996:143).

**Nsyilxcen Name:** none provided **English Common Name:** Goat's-beard

Latin Name: Aruncus dioicus

**Primary Uses:** not a culturally important plant to the syilx peoples

# Description

This perennial has numerous 1 to 2 m tall flowering stems. The large, leaves are fern-like in appearance with paired, toothed leaflets on each side of a long axis. They are dark green on top and lighter with fine hairs on their undersides. Clusters of tiny, creamy-white flowers bloom at the ends of the stems from May to mid-summer.

## Habitat

This plant is more common in low to subalpine elevations in the Coast/Interior transition zone. It prefers moist locations in forest opening, clearings, and seepage areas (Parish et al. 1996:218).

# Uses

While Aruncus dioicus was used for medicinal purposes by some Interior peoples, there are no known uses for this plant recorded for syilx peoples.

**Nsyilxcen Name:** ntsástsestsn

**English Common Name:** Purple Aster / Showy Aster

**Latin Name:** Aster conspicuus **Primary Use:** medicine

## **Description**

❖ This single-stemmed perennial grows from 30 to 100 cm tall. Oval- to lance-shaped leaves with sharp-toothed edges alternate along the stem. The top of the stem, from July to October, is branched with numerous composite heads of blue to violet flowers, with up to 35, 1.5 cm long petals, and yellow centres.

## Habitat

❖ Showy Aster is common and widespread in the Okanagan region. It can be found at low to mid elevations mainly in dry, open forests and meadows, although this plant can tolerate somewhat moister conditions (Parish et al. 1996:122).

#### Uses

Syilx people recognised the excellent medicinal properties of this plant. They soaked the roots in hot or cold water and drank the infusion for a variety of ailments, including gonorrhoea. The liquid was also used externally to wash sores, open wounds, boils, and infections. To ease the pain of a toothache, a piece of root was applied directly to the affected tooth. The leaves were also mashed into a poultice and placed over boils and haemorrhoids (Turner et al. 1980:79-80).

**Nsyilxcen Name:** *smúk™a?xn* 

English Common Name: Arrow-leaved Balsamroot / Spring Sunflower

Latin Name: Balsamorhiza sagittata

Primary Uses: food, medicine, and technology

# **Description**

❖ As the English name implies, this perennial herb is the harbinger of spring in the Okanagan. A number of soft stems grow from 20 to 80 cm tall from a spray of long-stalked, slivery-green arrowhead-shaped leaves, which are up to 30 cm in length. Bright yellow flowers, with up to 25, 2.5 cm long petals, bloom at the ends of each stem in late April to early May.

#### Habitat

These plants grow at low to mid elevations on dry, stony slopes, in grasslands, and in open forests throughout the Interior (Parish et al. 1996:133; Klinkenberg 2017[a]).

## Uses

- ❖ All parts of this plant are edible and the plant provided an important food for Interior First Nations peoples. In early spring, the young shoots were dug up before they turned green and were eaten raw or baked. The young leaves were eaten raw or steamed. Flower bud stems, with the outer skin peeled off, were also eaten either raw or boiled. The taproots were sometimes steamed or roasted in pits and eaten. The roots were also dried and pounded into flour. The seeds were gathered after the flower heads dried between June and August, ground into flour, and either eaten as powder or mixed together with such foods as pine nuts or dried Saskatoon berries.
- Syilx also dried the leaves and smoked them like tobacco, but mixed them with kinnikinnick for this purpose (Turner et al. 1980:80-81; Parish et al. 1996:133).
- ❖ A poultice of dried, powdered leaves was applied directly to skin that had suffered severe burning. This helped ease the pain of the burn and encourage healing. Dried and toasted roots were powdered and sprinkled on skin sores and boils. The roots could also be mashed and boiled in water and applied as a salve for skin sores. A tea made by boiling the roots was drunk for rheumatism. A concoction was also made using the shredded inner portion of the roots and mixing that with water. This was used as a hair tonic and rubbed onto the hair and scalp (Turner et al. 1980:82).
- ❖ An interesting note about this plant is its role in preparing young Syilx boys to walk silently and softly across the forest floor when wearing moccasins. The boys wrapped their feet in balsamroot leaves and challenged themselves to walk as far as possible without tearing the leaves (Turner et al. 1980:81).

**Nsyilxcen Name:** *kwilkwil* 

**English Common Name:** Red Indian Paintbrush

**Latin Name:** Castilleja miniata

**Primary Use:** not a culturally important plant to syilx peoples

# **Description**

❖ This perennial herb grows up to 80 cm tall and has several stems sprouting from a woody base. Each stem is topped with a feathery red flower. The leaves growing along the stems are narrow and lance-shaped. The flowery part of the plant resembles a paintbrush as each is made up of hairy red, scarlet, or orange bracts, or specialised leaves. Concealed within the bracts are greenish petals with red tips. A similar species, *C. hispida*, is mainly found in the southern half of the Interior. It is distinguished from *C. miniata* for the stiff hairs that grow along the stems.

## Habitat

This plant is found throughout the Interior region from mid to high elevations in dry areas, such as open forests, clearing, grassy slopes, and disturbed areas beside roads and along trails (Parish et al. 1996:168; Klinkenberg 2017[b]).

## Uses

Syilx peoples likely did not make any distinction between these two species of Red Indian Paintbrush. This plant did not have any cultural importance to the people apart from being a pretty flower. The Nsyilxcen name, *k*\*\*ilk\*\*îl, makes reference to the red colour of the bracts (Turner et al. 1980:138).

Nsyilxcen Name: skwnkwin'm

**English Common Name:** Spring Beauty / Indian Potato

Latin Name: Claytonia lanceolata

Primary Use: food

# Description

This perennial herb yields a spherical corm from which extend fibrous roots and a single, or several, erect stems from 5 to 25 cm long. Corms range in size from 2.5 cm across to 7.5 cm. The more stems a plant has, the larger the corms. One to a few lance-shaped leaves sprout at the base of the stems. Pairs of leaves grow on flowering stems just below the flowering tops. Flowers appear on the lowering stalks in early spring just after the snow melts. Each stalk can produce from 3 to 20 white or pinkish flowers, each with five petals. The petals often have deep pink veins that extend the length of the petal.

# Habitat

❖ This plant grows at mid to alpine elevations in damp locations, such as forest clearings, meadows, grassy slopes, among shrubs, and in late snowbed sites (Parish et al. 1996:258; Turner et al. 1980:113).

# Uses

The round, fleshy corms are harvested from April to end of May, depending on location, just after the plants have bloomed. The corms were usually cooked and eaten right away but could be stored in a pit in the ground lined with pine needles and cottonwood bark to prevent freezing. Corms taste much like garden potatoes (*Solanum tuberosum*) and were cooked in much the same manner, by steaming or boiling (Turner et al. 1980:113).

**Nsyilxcen Name:** none provided

**English Common Name:** Dwarf dogwood / Bunchberry

Latin Name: Cornus Canadensis

Primary Use: not a culturally important plant to syilx peoples

## Description

This is a low growing, evergreen perennial, from 5 to 20cm tall. Near the ends of short stems are four to six glossy, dark green leaves that grow in a whorl-like fashion. These 2.5 to 5 cm long leaves are oval-shaped and have five distinct veins running along their length. Four white, petal-like bracts, or specialised leaves, surround a cluster of tiny greenish-white to mauve flowers at the centre of each cluster of leaves. The flowers emerge in late spring and fruit to bright red, fleshy drupes, or stone fruit, that ripen in August.

#### Habitat

Dwarf dogwood is widespread in the Interior and can be found at low to subalpine elevations. This plant prefers dry to moist forests and clearings where there is some shade, and organically rich soils where soil temperature remains below 20C (Parish et al. 1996:250; Missouri Botanical Garden 2017[d]).

#### Uses

Even though the drupes are sweet, syilx peoples did not use them as a food source. In fact, some Interior peoples considered them to be poisonous.

Nsyilxcen Name: stkcxwilp

English Common Name: Red-osier Dogwood / Red Willow

Latin Name: Cornus sericea

Primary Uses: food, medicine, and technology

# Description

❖ This bushy, deciduous shrub grows from 1 to 4 m tall. The lowest stems lie on the ground and root. The shrub produces bright red fresh stems after the frost has passed. The leaves are bright green, oval-shaped with pointed tips, from 5 to 12.5 cm long, and have five to seven deep veins that span out from the central vein towards the leaf tip. The leaves turn red or orange in late summer and purple in the fall. In late spring, 6 cm wide, disk-like clusters of small, white to greenish flowers grow at the ends of stems that sprout from the main branches. These flowers produce clusters of small, bluish-white, bitter berries.

#### Habitat

Red-osier dogwood is widespread in the Interior at low to mid elevations. It is a moisture-loving shrub and can be found in swamps, moist forests, and in openings and clearings that retain abundant moisture (Parish et al. 1996:80; Missouri Botanical Garden 2017[e]).

# Uses

- Red-osier dogwood was a very important plant for syilx peoples. The berry-like fruits were eaten when they ripened in late summer, at the same time as chokecherries. The berries were pounded and mixed with chokecherries or Saskatoon berries to make them sweeter, but they were also boiled and eaten alone.
- ❖ This shrub was also used as medicine. The inner bark of the branches was sometimes boiled with chokecherry or alder bark to make a concoction that was useful as a general tonic, blood purifier, and healing drink. It is a particularly potent drink for post-partum women. When drunk four times daily it helps cleanse the woman's womb. The inner bark also was scraped off, dried, and mixed with kinnikinnick or tobacco and smoked for both pleasure and as a good cold medicine. People with upset stomachs drank a tea made by boiling young branches in water. This tea caused vomiting, which in turn relieved the stomach condition. Large quantities of this tea (about 2.3 litres) were drunk in the morning and again at night to relieve coughing caused by consumption. A concoction made by boiling the wood and bark together, sometimes mixing it with chokecherry wood and bark, was used to wash the body, hair, and scalp to eliminate dandruff, and itchy scalp. It is also purported to prevent hair loss. A poultice was made by smashing the inner bark and applying it to skin rashes, cuts bruises, toothaches, sore throats, and headaches, and for chest colds in babies.
- The smaller branches were used to make tools, utensils, and fish traps while the larger limbs served as frame poles for houses and food caches. Softened strips of bark were twisted together to make lashings for fish traps and raised caches, and used to sew around the

gunwales of canoes. Syilx peoples made red paint by powdering the bark and mixing it with resin from cottonwood buds (Turner et al. 1980:96-98).

**Nsyilxcen Name**: a?p'ənwix\*tn

English Common Names: Wild Buckwheat / Sulphur Flower / Parsnip-Flowered Buckwheat

**Latin Name:** *Eriogonum heracleoides* **Primary Uses:** medicine, technology

# **Description**

❖ This perennial grows in clumps of stems from 10 to 40cm tall. Narrow, 3 to 10 cm long, lance-shaped leaves grow in whorls at the base of each stem. Their woolly surfaces give them a greyish tinge. About halfway up the stem is a second whorl of short, 2 cm long, narrow leaf-like bracts, or modified leaves, from which the main flower stalk emerges. Clusters of small, white to cream-coloured flowers sprout at the ends of three or four short stalks at the top of each stem.

## **Habitat**

❖ This plant is found scattered throughout the Okanagan region at low to lower subalpine elevations. It favours dry, open conditions and is particularly common in sagebrush grasslands, open forests, and on the warm slopes of mountains (Parish et al. 1996:201; Klinkenberg 2017[c])

## Uses:

- ❖ Syilx peoples made a tea by boiling the roots as a cure for diarrhoea. They also boiled the roots and stems together to use as a wash for infected cuts, and they drank this concoction for colds, tuberculosis, cancer, blood poisoning, and many other illnesses. Mashed leaves served as a poultice, which was applied directly to cuts. They also steeped the leaves in hot water and used the tea to clean out cuts and sores (Turner et al. 1980:112; Parish et al. 1996:201; Moerman 1999:222).
- The stems of wild buckwheat also made a fun child's toy. Syilx children broke the main stems from the plant in such a way as to leave a side branch, which formed a "hook". Two children would hook their branches together and try to pull his or her opponent's branch. The child whose branch broke first was the loser of this game (Turner et al. 1980:112).

Nsyilxcen Name: tq'imtq'm

**English Common Name:** Wild Strawberry

**Latin Name:** *Fragaria virginiana* **Primary Uses:** food and medicine

#### **Description**

❖ This low-growing perennial grows to about 17 cm tall and spread indefinitely by runners, or stolons, that root into the ground to create new plants. The bluish-green, oval leaves are up to 6 cm. Each leaf appears as 3 leaflets. They have toothed edges and are coated with fine hairs on the underside. Small, white flowers with yellow centres bloom in clusters below the leaves. Bloom time, depending on location is from April to May. Small, 1.2 cm wide, strawberries begin ripening in May, and in June at higher elevations.

## Habitat

❖ This plant is fairly common and widespread at low to subalpine elevations. It can tolerate both dry and moist locations and is found in forests, clearings, and disturbed areas (Parish et al. 1996:219).

## Uses

- During the ripening period, syilx peoples picked large amounts of the berries. These they ate fresh or mashed and dried into cakes, sometimes with Saskatoon berries to add to the flavour. Today, the berries are eaten fresh or are canned for later consumption.
- ❖ Dried leaf powder was applied to a newborn's navel to quicken healing and prevent infection. The leaf powder was also sprinkled in a baby's mouth when it was sore. The powder also used as a disinfectant and was sprinkled over open sores, which were then sealed with deer fat (Turner et al. 1980:125).

**Nsyilxcen Name:** *mitl'mn* 

**English Common Name:** Brown-eyed Susan

Latin Name: Gaillardia aristata

Primary Use: medicine

# Description

❖ The perennial herb is similar in appearance to smúk™a?xn (Balsamorhiza sagitta), but blooms later in the season. It has erect, unbranched stems from 20 to 70cm tall. Lance-shaped, coarsely toothed, greyish-green leaves sprout at the base of the stems, and smaller, deeply lobed leaves alternate along the stem. Bright yellow ray flowers with purplish-brown centres (disk flowers) begin to appear in May and continue to bloom all summer.

# Habitat

This flower is widespread throughout the Interior found at low to mid elevations. It prefers hot, dry locations in open forests, and on grasslands and rocky slopes (Parish et al. 1996:133).

# Uses

Syilx peoples used the whole plant in a number of ways. Primarily, it was used as an analgesic to draw out pain. For body pain, the plant was mashed, wrapped in cheesecloth, and applied to the aching body part. This treatment was particularly effective for back pain. As well, the whole plant was boiled in water, and the tea drunk for kidney problems. A person with venereal disease would bathe in a solution made by either steeping or boiling the plant in water (Turner et al. 1980:84; Parish et al. 1996:133; Moerman 1999:241).

**Nsyilxcen Name:** *táqwa?* 

**English Common Name:** Sticky Geranium **Latin Name:** *Geranium viscosissimum* 

Primary Use: medicine

# **Description**

The species name of this perennial herb refers to the sticky glandular hairs that cover the long, 40 to 90 cm stems, and the leaves. The basal leaves are deeply palmately lobed, like the fingers of a hand, with five to seven sharply toothed divisions. The lavender-pink to

purple, five-petalled flowers, 2.5 cm across, have deep purple veins running their length. They bloom in clusters at the tops of the stems from May to September, depending on the location. The stickiness of the leaves allows this plant to trap insects. Nitrogen derived from the protein of the insect is then absorbed into the plant. This feature enables this plant to survive well in nutrient-poor habitats (Scheinost and Stannard 2010).

## Habitat

This flower grows at low to mid elevations in dry parts of the Interior. It can be found in scattered clusters in open forests, grasslands, and meadows (Parish et al. 1996:262).

#### Uses

❖ The medicinal properties of this plant were found in the roots and the leaves. Syilx peoples made a tea by boiling the roots. Once the liquid had cooled, it was used to wash out sore eyes. The roots were also pounded and then heated for use as a poultice. Crushed leaves were applied to sores, and a single leaf could be held between the lips to relieve lip pain (Turner et al. 1980:106).

**Nsyilxcen Name:** səw'numta?x

**English Common Name:** Golden Aster

Latin Name: Heterotheca villosa

**Primary Uses:** not a culturally important plant to syilx peoples

# **Description**

❖ This perennial herb emerges from a long taproot. It has several branched stems that grow from 10 to 50 cm tall. The narrow, oblong, leaves grow from 1 to 5 cm long and alternate along the stems. Basal leaves, those at the bottom of the stem, tend to fall off soon after emerging. The stems and leaves are covered with fine hairs or glands. Numerous yellow ray flowers with yellow disk centres bloom at the ends of branching stems. The flowers have from 10 to 25 petals and are from 2 to 4 cm across. They bloom from July to September.

#### Habitat

This flower is found scattered throughout the Okanagan region at low to mid elevations. It prefers dry locations on plateaus and basins, grasslands, sagebrush shrublands, and in open ponderosa pine forests (Parish et al. 1996:132)

#### Uses

❖ No known local uses

**Nsyilxcen name:** *yititemníłp* 

**English Common Name:** Round-leaved Alumroot

**Latin Name:** Heuchera cylindrical

Primary Use: medicine

# **Description**

❖ This perennial herb appears as a cluster of round basal leaves with stems covered in fine hairs rising from this cluster from 15 to 90 cm high. The dark green leaves are somewhat heart-shaped, deeply lobed, and edged with rounded teeth. They can be as large as 7.5 cm

across. From June to July, small, bell-shaped, cream to yellowish-green flowers bloom in densely packed spikes along the ends of the flowering stems.

#### **Habitat**

This plant is widespread and common from low to alpine elevations. It prefers warm, dry locations, such as plateaus and basins in the Okanagan region, open forests, exposed rocky slopes and cliffs, and grasslands (Parish et al. 1996:266).

# Uses

❖ Yititemnílp grows from a short, thick rhizome, and it is this root that contains most of the healing properties. Sucking on a piece of the root helped heal sore throats. The root could also be boiled and the tea used as a mouthwash for the same purpose. Boiling the roots with those of Oregon grape made a very potent blood-purifying tonic. Generally, this was taken in March and November. Externally, the root was used as a poultice for cuts and sores to help stop bleeding and speed healing. The outer layer of the root was peeled off before the remainder was mashed. Sometimes the mashed root was steeped in water to use as a wash for skin sores. The roots also were mixed with puffball spores and used as a salve to treat diaper rash (Turner et al. 1980:138; Parish et al. 1996:266).

Nsyilxcen Name: sp'i\(\hat{i}\)'\(\pi\)

**English Common Name:** Bitterroot

**Latin Name:** *Lewisia rediviva* **Primary Uses:** food and medicine

# Description

❖ *Sp'ii'am* is a low growing perennial herb with short flowering stalks from 1 to 3 cm tall. The succulent, cylindrical leaves all grow from the base of each stalk and wither and dry by the time the plant flowers. Flowers are white to deep pink with 12 to 18 narrow petals from 1.8 to 3.5 cm long. Flowers appear in late spring. Once the flowering stage is over, the whole plant withers to just the underground taproot. New leaves sprout in late summer and remain all winter.

## Habitat

❖ *Sp'ii'am* grows a low to mid elevations in the Okanagan basin and prefers dry grasslands and sagebrush covered slopes (Parish et al. 1996:257; Klinkenberg 2017[e]).

## Uses

- The roots were a popular food for syilx peoples. They were dug in April and May before the plants were in full bloom. The tastiest roots were said to be those from plants that grow at higher elevations in moist ground among rocks. The roots were peeled and the very bitter, small red "heart" was removed. The remaining parts were steamed or boiled, or dried for winter use. Sometimes the dried roots were mixed with gooseberries or Saskatoon berries to keep them from getting too bitter when in storage. The roots were cooked separately but always mixed with other foods because of their bitterness.
- The raw root was externally as a poultice and applied to sores. Eating large quantities of raw bitterroot was said to cure poison ivy rashes. Consuming raw or dried roots helped people with diabetes.

• Sp'i\(ildelta\) m was such an important plant that syilx peoples traded large quantities of the roots to the Colville and N\(i\)e?kepmx (Thompson) peoples in exchange for dried salmon (Turner et al. 1980:114-116; Moerman 1999:303).

Nsyilxcen Name: smətsnálekw

**English Common Name:** Large-fruited Desert Parsley / Wild Carrot

**Latin Name:** *Lomatium macrocarpum* **Primary Uses:** food and medicine

## **Description**

❖ This species is a 25 cm tall, perennial herb that grows from a long, smooth taproot 20cm or more long. The leaves grow close to the base of the plant on short stalks. They are fern-like in appearance and covered with fine hairs, making the leaves look greyish. Numerous purple stems branch out like spokes, each bearing a white to purplish-white cluster of flowers during the spring.

#### Habitat

❖ This plant is found scattered throughout the Interior region, mainly at lower elevations. It prefers dry, warm, open areas, such as on gravelly slopes and grasslands (Parish et al. 1996:248).

#### Uses

- Smatsnálek was a principle food for syilx peoples. The taproots were dug up in late June or early July, peeled, and either eaten raw or boiled. Sometimes the roots were dried for several days and stored for winter use. Raw roots taste a bit like celery leaves. They were cooked on their own, or along with bitterroot or tiger lily bulbs. Salmon roe was also mixed with the roots on occasion.
- ❖ The roots had potent medicinal properties and were used effectively for colds, sores, and broken bones. Chewing a piece of rehydrated dried root helped alleviate the discomfort from colds, flu, and chest congestion. A poultice of pounded roots was applied to the inside of babies' mouths if they had mouth sores or thrush. Mashed roots also were made into a poultice and placed on broken bones and open wounds (Turner et al. 1980:69; Moerman 1999:315).

**Nsyilxcen Name:** *ẋ<sup>w</sup>uxtilp* 

**English Common Names:** Indian Celery / Narrow-leaved Desert parsley

**Latin Name:** *Lomatium ambiguum* **Primary Uses:** food and medicine

# Description

❖ This perennial grows from 20 to 80 cm tall from a long, slender taproot. The leaves that grow from the base of the stem are long and thin with long, narrow segments. In late spring, umbrella-shaped clusters of yellow flowers bloom at the ends of the stems

## Habitat

This plant is found scattered at low to mid elevations in dry basins and plateaus, on open, rocky slopes, grasslands, and shrublands (Parish et al. 1996:249).

#### Uses

- The bright yellow flowers and upper leaves were harvested in June, dried, and then used to flavour stews, meats, and salads. This practice continues today.
- An infusion made from the flowers and leaves was drunk for colds and sore throats.
- Another variety of *Lomatium* sp., *Lomatium triternatum*, was also referred to as "Indian celery." While each species has unique qualities, both were used in a similar manner for flavouring foods and in medicine (Turner et al. 1980:70).

Nsyilxcen Name: ky'ir'y'ir'mn'tsút

English Common Name: Orange honeysuckle

Latin Name: Lonicera ciliosa Primary Use: technology

# Description

❖ This woody, climbing vine can reach as tall as 6 metres. The large, green, oval-shaped leaves grow in pairs along the stems and, in June, provide a contrasting backdrop for clusters of orange-yellow to red, narrow trumpet-shaped flowers (Parish et al. 1996:84).

#### **Habitat**

❖ In the Okanagan, this vine is found at low to mid elevations on the plateaus. It prefers open shade to part sun, It is more commonly found in forests and thickets where there is some shade, and moister soil that is sandy or loamy (Parish et al. 1996:84)

## Uses

Some Interior peoples used the long stems for weaving bags, binding, and lashing, but white clematis [Clematis ligusticifolia] was more commonly used for these purposes (Parish et al. 1996:84; Turner et al. 1980:117).

**Nsyilxcen Name:** none provided **English Common Name:** Ostrich Fern **Latin Name:** *Matteuccia struthiopteris* 

**Primary Use:** not a culturally important plant to syilx peoples

# Description

❖ This large fern grows in a vase-like cluster of large frond up to 2 m tall. The sterile, outer fronds are light green and deeply cut into numerous segments. The leaflets alternate along the leaf axis. Each leaflet is further dissected. Shorter, feather-shaped, fertile fronds grow in the centre of this cluster. The leaflets on these are paired along the leaf axis and are not further segmented. The fertile fronds emerge in mid-summer, become dry and turn dark brown, and survive through the winter.

## Habitat

This moisture-loving fern is widely scattered throughout the Okanagan region. It is found mostly at low elevations in shaded areas on moist to wet riverbanks, streams, and lakes, and in moist forests (Parish et al. 1996:364; Missouri Botanical Garden 2017[g]).

## Uses

• Ostrich fern fiddleheads are the tastiest and safest to eat. However, there is no record of syilx peoples using them as food (Parish et al. 1996:364).

Nsyilxcen Name: smańxw

**English Common Name:** Wild Tobacco **Latin Name:** *Nicotiana attenuata* 

Primary Use: ceremonial

# Description

This annual herb grows from 30 cm to 1m tall with large, oval to lance-shaped leaves, from 2.5 to 12 cm long and up to 5 cm wide, growing from short stalks along the stems. The upper leaves are shorter and narrower than the lower ones. Stalks and leaves are covered in fine hairs. Clusters of pinkish to greenish white trumpet-like flowers, up to 3 cm long, bloom from June to September along the ends of flowering stalks (Washington State DNR).

#### Habitat

Syilx peoples used to gather wild tobacco along creeks and in open, moist locations. It could also be found in dry clearings and sandy bottomlands (Turner et al. 1980:140; Washington State DNR).

#### Uses

Syilx peoples gathered the leaves in the fall and left them in the sun for a few days to dry. The dried leaves were placed in a buckskin bag and pounded into small pieces. These crumbs were then stored in a separate bag ready for smoking. Today, cultivated tobacco, *Nicotiana tabacum*, is used for smoking and ceremonial purposes. It is also called *smańx*<sup>w</sup>. Neither variety has been cultivated (Turner et al. 1980:140).

**Nsyilxcen Name:** sxwina?

English Common Name: Prickly-Pear Cactus

Latin Name: Opuntia fragilis and Opuntia polyacantha

Primary Uses: food, medicine, and technology

## **Description**

❖ Prickly-pear cactus grows in thick clusters usually rising no more than 5 to 10 cm above the ground. Each round to egg-shaped stem is from 2 to 5 cm long and is covered in stiff, barbed spines, which are modified leaves, some as long as 3 cm. In June and July, stems may produce a single, bright yellow flower with red stamens in the centre.

#### Habitat

❖ Opuntia fragilis grows throughout the Plateau region at low elevations on dry sandy or gravelly slopes, grasslands, openings in pine forests, and on rocky outcrops, particularly with southern exposures. Opuntia polycantha is found in similar environments but is confined to the southern regions of the Okanagan basin (Parish et al. 1996:217; Klinkenberg 2017[d]).

#### Uses

- This succulent cactus can be gathered at any time of the year for food. Before steaming them in pit ovens or roasting them over an open fire, the spines were singed off by holding them over an open flame. The Okanagan made a cactus soup by boiling fat and cactus together. Because this plant was so readily available, it was sometimes made into soup to help stave off starvation in times of low yields of other foods.
- ❖ Juice from the cactus was sometimes used as an eye medicine. A poultice was also made from cactus. After the spines were removed and the outer skin peeled off, the inner pulp was mashed and mixed with pine pitch to make a poultice for skin sores and infections. The pulp was also particularly beneficial as a diuretic when eaten.
- ❖ The spines of Prickly-pear cactus were beneficial in technology. Two strong spines could be bound together with Indian hemp and pitch to form a fishhook. The spines were also used to pierce ears. Mice and other animals were prevented from climbing up supporting poles of food caches when a ring of cactus, complete with spines, was placed around the poles Turner et al. 1980:92-93; Moerman 1999:366).

**Nsyilxcen Name:** cuqcuqmáłpu

**English Common Name:** Bracken Fern **Latin Name:** *Pteridium aquilinum* 

Primary Use: technology

## **Description**

This metre high deciduous perennial has large, solitary frond that grow from a long, branched, spreading rhizome. The large, triangular fronds are deeply segmented. Paired leaflets grow opposite each other along the leaf axis. Each leaflet is further dissected to give the leaves a feathery appearance.

## Habitat

This fern is scattered throughout the Okanagan region at low to mid elevations in moist or wet locations, such as moist forests, burn areas, meadows, clearings, and along roadsides (Parish et al. 1996:326).

## Uses

Syilx peoples did not eat the fiddleheads of bracken ferns. Rather, the mature fronds of this and other ferns were dipped in water and used in cooking pits to separate the foods being cooked (Turner et al. 1980:18).

**Nsyilxcen Name:** *sknirmən* 

**English Common Name:** Sagebrush Buttercup

**Latin Name:** Ranunculus glaberrimus

**Primary Use:** medicine

# **Description**

This ground-cover perennial herb produces numerous stems, from 5 to 15 cm long, that either lie flat on the ground or extend upward. The fleshy leaves grow at the base of the stems and are somewhat egg-shaped with two slight notches at the tip. In early spring,

bright yellow, five petalled flowers, about 2.5 cm wide, bloom at the ends of 10 cm long stalks.

#### Habitat

❖ A harbinger of spring, this common herb is found at low elevations in the Okanagan region in dry, open forests, grasslands, on slopes covered with sagebrush, or rocky slopes, and in moist meadows (Parish et al. 1996:207; Klinkenberg 2017[f]).

## Uses

- The whole plant was used externally for sore joins and pains throughout the body. The plant was mashed and dampened with water and applied as a poultice to the affected areas.
- ❖ It should be cautioned that *sknirman* very powerful medicine. The leaves will cause blistering, which helps draw out the poison. The plant is also used as a poison for coyotes. The fresh or dried plant is mashed up and laid on a piece of meat used to bait the animals (Turner et al. 1980:119).

**Nsyilxcen Name**: *k'ixán* 

English Common Name: False Solomon's Seal

**Latin Name:** *Smilacina racemosa* **Primary Uses:** food and medicine

## **Description**

❖ This 30 to 100 cm tall perennial shrub grows from fleshy rhizomes. It tends to grow in clumps with arching, unbranched stems. The large, shiny green leaves that alternate in pairs along the stems have deep parallel veins running their length. From late spring to early summer, spikes of creamy white flowers bloom at the ends of the flowering branches. These flowers are heavily scented. By late summer, the flowers produce attractive clusters of fleshy, red berries.

#### Habitat

This plant is found throughout the Okanagan region from low to subalpine elevations. It prefers moist environment, such as forests, and shaded areas in clearings and ravines (Parish et al. 1996:299).

#### Uses

- ❖ The rhizomes were harvested in large quantities in spring and early summer and then dried. Later they were soaked and pit-cooked with other bulbs.
- ❖ Boiling the rhizomes in hot water made a sweet-tasting medicine that was drunk for colds. This tea also helped increase a person's appetite (Turner et al. 1980:48).

## **SHRUBS**

**Nsyilxcen Names**: berries − *síya?*; bush − *sł<u>a</u>iłp* 

❖ NB. Syilx peoples recognised eight varieties of this plant and named each variety based on characteristics such as sweetness and size of the berries, flowering and ripening of fruit times, height of the plant, leaf shape, and the habitat in which it grows. The name *siya?* is a general term (Turner et al. 1980:120, 122; Parish et al. 1996: 55).

English Common Names: Saskatoon Berry / Serviceberry

Latin Name: Amelanchier alnifolia

Primary Uses: food, medicine, and technology

# **Description**

❖ Siya? grows as a shrub or a small tree, varying in heights from 1 to 5 metres tall. It has dark grey to reddish bark that is very smooth along the stems. The round leaves are about 3 cm in size and have toothed edges. In April, clusters of white flowers with oblong petals bloom at the tips of branches.

## Habitat

❖ Síya? is a common plant in the Interior and can be found at low to mid elevations in well-drained soils in forests, and in open areas along dry slopes, in gullies, grasslands, and in disturbed areas (Parish et al. 1996:55).

## Uses

- ❖ Saskatoon berries were and continue to be the most popular and widely used berry in Southern and Central BC First Nations. The berries are ready to be picked throughout July, but may also be available as late as August and September depending on the location. Saskatoon berries were eaten fresh, dried for storage and later consumption, or boiled with other foods, such as bitterroot, salmon roe, and meat dishes, to add flavour. The sweetness of the dried Saskatoon berries helped counter some of the bitter foods with which they were sometimes mixed (Turner et al. 1980:123).
- ❖ Saskatoon bushes also yielded medicinal properties. Boiling the branches made a tea that was used as a general tonic and to help fight cold symptoms. As a contraceptive, women drank a tea made by boiling Saskatoon branches together with red willow and soapberry branches (Turner et al. 1980:123; Parish et al. 1996:55). A decoction made by boiling the ash from burned Saskatoon branches and pine branches or buds was sometimes consumed to prevent pregnancy (Turner et al. 1980:123; Moerman 1999:67).
- ❖ The hard, straight-grained wood of the Saskatoon bushes was used to make arrows, digging sticks, spears, and seed beaters. Thin, fresh branches could be twisted to make rope (Turner et al. 1980:123).

**Nsyilxcen Name:** cq'was'q'lstn

**English Common Name:** Big Sagebrush **Latin Name:** *Artemisia tridentata* 

**Primary Uses:** medicine and technology

# **Description**

❖ Big sagebrush is aptly named. This large, bushy shrub grows to 2 m tall and is covered in greyish-green leaves all year round. The bark is dark grey and appears in shreds on older branches. The leaves are wedge-shaped, with the wider ends tipped with three points or

teeth. In late summer, these aromatic shrubs are shrouded in composite heads of yellow flowers that blossom along the ends of new growth.

#### **Habitat**

❖ Big sagebrush can be found throughout the Interior and is common at low to mid elevations where there is plenty of open grassland with neutral to acidic soils (Parish et al. 1996:67).

#### Uses

- ❖ Big Sagebrush was used extensively by Southern Interior First Nations peoples. Syilx peoples drank a tea made by boiling the leaves and branches together to treat sore throats, and tonsillitis. Made extra strong, this bitter tea induced heavy sweating in people with colds, which helped them recover faster. The seed heads and branch tips were also boiled together to make a strong tea for tuberculosis and indigestion. The tea acted as a laxative, and people taking it further cleansed by taking sweat-baths before and after drinking the tea. An infusion of the leaves was also drunk to treat smallpox. The leaves of Big Sagebrush contain a highly aromatic organic chemical compound called coumarin. Syilx people mashed the leaves and inhaled this scent to help clear stuffed sinuses. The roots also have medicinal properties, and when these were steeped in hot water, the resultant tea was drunk to treat colds and soar throats.
- ❖ Big Sagebrush bark is useable year-round. Fibres could be extracted from the bark and twined into rope for weaving mats, baskets, saddle blankets, and quiver cases. Poor people, those who could not afford to trade for better-quality materials or for some reason were unable to procure better-quality materials, used Big Sagebrush bark to make clothing, such as dresses, aprons, and breechclouts. The bark fibres were also used as tinder to start fires. Tightly twisted bark to a length of 60 to 90 centimetres served as a "slow match" for travellers. The wood was used for fuel and for smoking hides that were being tanned. Dried leaves were and still are used for smudging, a form of ritual cleansing (Turner et al. 1980:78-79; Moerman 1999:101-103).

**Nsyilxcen Name**:  $k^w$ *litk'i?lp* 

English Common Name: Redstem ceanothus

**Latin Name:** *Ceanothus sanguineus* **Primary Uses:** medicine and technology

## **Description**

Redstem ceanothus is a deciduous shrub that grows from 1 to 3 m tall. Its numerous erect stems are smooth and turn purplish red with age. One to 2.5 cm long, egg-shaped, finely toothed leaves alternate along the twigs. From May to July, small, fragrant white flowers bloom in dense clusters at the ends of the branches.

#### Habitat

This shrub is found scattered at low to mid elevations in the southern half of the Interior region. It grows well in moist to dry, open forests and clearings, and disturbed habitats. Fires help the seeds to germinate and Redstem ceanothus grows extremely well in burned out areas (Parish et al. 1996:68).

#### Uses

- Syilx peoples used Redstem ceanothus to treat wounds and burn. They dried the sapwood extracted from beneath the bark and pulverised into a powder to rub on sores and wounds that had first been covered with a layer of oil or grease. The bark was dried and ground into a powder to make a poultice to place on burns
- ❖ The wood also was used to smoke deer meat and as a fuel.
- ❖ Growth of this shrub was encouraged as the buds and branches were an important food for deer (Turner et al. 1980:119; Parish et al. 1996:68: Moerman 1999:146).

Nsyilxcen Name: tm'tm'ný?iłp English Common Name: Snowbrush Latin Name: Ceanothus velutinus

Primary Use: medicine

# **Description**

Snowbrush is a showy, evergreen shrub that typically grows from 0.5 to 3 m tall. The oval-shaped, highly fragrant leaves are shiny and sticky on top and velvety underneath. They vary in size from 2.5 to 7.5 cm long and grow alternately along stems of greenish bark. In the late spring through early summer, dense clusters of small, greenish-white flowers bloom near the ends of twigs that sprout from the main branches. These flowers release a pleasant spicy fragrance.

#### Habitat

This shrub is commonly found at low to subalpine elevations throughout the Interior plateaus and valleys. It prefers slightly moist to dry open locations in forests and on rocky slopes, and grows well in disturbed areas, such as along roadsides or in timber-harvested sites. Snowbrush flourishes in burned-out areas, as well, as heat from fires stimulates seed germination (Parish et al. 1996:69).

#### Uses

❖ Syilx people boiled the branch tops with the leaves attached to make a wash for dandruff. A milder wash was used to bathe babies and relieve the irritation of diaper rash. An infusion made by steeping branches in hot water was used as a wash for skin sores and eczema. Syilx people also made tea with the leaves that they drank to help heal broken bones and to purify the blood. The leaves also could be dried and powdered and applied directly to sores or mixed with pitch to make a salve (Turner et al. 1980:120).

**Nsyilxcen Names:** berries – p'úkwi?; bush – pukwi?iłp

English Common Names: Wolf Willow / Silverwillow / Silverberry

Latin Name: Elaeagnus commutata

Primary Use: technology

# **Description**

❖ This bushy shrub grows from 1 to 4 metres tall. Silvery, lance-shaped leaves alternate along the branches and are from 2 to 7 cm long. In May, clusters of aromatic, small, yellow, funnel-shaped flowers droop from short stalks along the branches, giving this shrub a fragrant, sweet scent when in bloom. Small berries, about 1.2 cm across, ripen from July to

September. These are covered in a silvery-white skin and house an egg-shaped, brown, striped nutlet.

#### **Habitat**

This shrub can be found from low to mid elevations scattered along the edges of wetlands, on sandbars, and in gullies. It also grows particularly well in disturbed areas, such as along roadways, and at the edges of forests (Parish et al. 1996:71).

## Uses

- ❖ Interior Salish First Nations used the inner bark to make bags, baskets, rope, clothing, and other important woven materials. The bark was stripped in the spring when the sap was running and the inner bark could be easily pulled apart into thin strips. The brown nutlets have darker stripes and were cleaned and polished to use as beads for necklaces or as decoration when sewn on clothing (Turner et al. 1980:99).
- ❖ Because of the infrequent and scattered growth of this plant, as well as its seasonality, the bark was a valuable trade item. Three bundles of prepared bark, each measuring about 13 centimetres thick, could be traded for a blanket (Parish et al. 1996:71; Turner et al. 1980:99).

Nsyilxcen Name: none provided English Common Name: Rabbit brush

Latin Name: Ericameria nauseosa (formerly Chrysothamnus nauseosus)

**Primary Uses:** medicine and technology

# Description

This is a small, perennial shrub that grows to 1 m tall and yields numerous branches covered in dense, felt-like hairs. The greenish grey leaves are long and narrow with a woolly coating on both surfaces. Composite heads of small, yellow flowers bloom in late summer at the end of the branches.

## Habitat

This shrub is common throughout the Okanagan basin to mid elevations. It is found in dry open forests, grasslands, and disturbed areas (Parish et al. 1996:67).

#### Uses

❖ Syilx women used clumps of the leaves as sanitary napkins. After childbirth, this use of the leaves was considered particularly healing. The smoke from burning branches was used for smoking hides. The plant was also used for horses. For example, Syilx mashed branches and leaves together, mixed this with water, and spread it all over the horses' hides to repel horseflies and gnats. Burning branches to create smoke was said to cure distemper when the smoking branches were held under the horse's nose (Turner et al. 1980:83).

**Nsyilxcen Name:** *mets'mets'í hp* 

English Common Names: Oceanspray / Ironwood

**Latin Name:** Holodiscus discolor

**Primary Uses:** medicine and technology

# **Description**

❖ This is a medium to tall deciduous shrub that grows to 4 m tall. Clusters of stems are erect and somewhat arching. Young stems are ridged, while older ones have reddish-brown bark that easily peels away. Dull green, triangular shaped, coarsely toothed leaves with deep veins alternate along the stems. The upper surface of the leaves has coarse hairs, while the under surface is softer and more woolly. Dense cone-shaped clusters of sweet smelling, tiny white to cream coloured flowers bloom at the ends of the new growth branches from May to July. These turn to brown clusters of seeds that remain on the branches all winter.

## Habitat

❖ This shrub is found in the southern part of the Okanagan at low elevations and in open areas where it can receive adequate sunlight throughout the day. It is most commonly found in open woodlands, clearings, and areas disturbed by logging (Parish et al. 1996:62; Garry Oak Ecosystems 2017).

#### Uses

- The leaves and bark of this plant was used externally to treat sores and burns. Green leaves were dried and powdered and applied to sores. The outer bark was dried and powdered and mixed with Vaseline to make a salve for burns.
- The wood from this tall shrub is very hard, but was further hardened by heating it in a fire. Prepared in this manner, it was used to make digging sticks, fishing-spear heads, bows and arrows, tipi pins, drum hoops, cradle covers, and even gambling sticks (Turner et al. 1980:126; Moerman 1999:268).

**Nsyilxcen Name:** stsərsiłmix

**English Common Name:** Tall Oregon grape

Latin Names: Mahonia aquifolium / Berberis aquifolium

**Primary Uses:** food, medicine, and technology

## **Description**

This evergreen shrub can grow up to 180 cm tall. It has stiff, woody branches with yellowish-brown to grey outer bark and bright yellow inner bark. The glossy, oblong leaves range from red-tinted in spring, to dark green in summer, purplish in fall, and bronze in winter. These leaves are stiff and edged with sharp teeth. Erect clusters of bright yellow flowers bloom in April and produce blue berries in grape-like clusters in late summer.

### Habitat

❖ This shrub is commonly found at low to mid elevations throughout the dry plateaus of the Okanagan, in forest clearings, and in warm or sheltered clearings and rocky hillsides. It prefers partly shaded locations but can also survive in full sun (Parish et al. 1996:72; Missouri Botanical Garden 2017[f]).

### Uses

This versatile plant was used extensively by Southern Interior peoples. The tart berries were gathered in mid-August and either eaten raw or made into jelly used with meat. Occasionally, the berries were also mashed and dried into edible clumps.

- ❖ Oregon grape has a number of medicinal uses and was an important medicine to the syilx peoples. An infusion of the inner bark was used as an eyewash for blurred vision or bloodshot eyes. A decoction of Oregon grape branches mixed with chokecherry branches made an excellent blood purifier. Oregon grape roots boiled with *Chimaphila umbellate* (prince's pine) or the roots of yarrow and wild raspberry also made an effective blood-purifying tonic. Boiling the roots with those of chokecherry or kinnikinnick branches produced an excellent tonic for the kidneys. A tea made by boiling the roots was drunk for tuberculosis.
- ❖ The yellow inner bark of stems and roots was boiled in water and the resultant bright yellow liquid used to dye plant materials for baskets, porcupine quills, and mountain goat wool. Branches of Oregon grape, along with those of wild roses, were placed in graves and throughout the houses of people who had died to prevent their ghosts from returning (Turner et al. 1980:85-87; Moerman 1999:328-329).

Nsyilxcen Name: skwkwlkwisiłmlx English Common Name: Falsebox Latin Name: Paxistima myrinites

**Primary Use:** medicine

## Description

The nsyilxcen name,  $sk^wk^wlk^wisilmlx$ , means "little kinnikinnick bush," and the leaves of this evergreen shrub, while growing as tall as 60 cm, do resemble kinnikinnick somewhat. The glossy, leathery, leaves grow opposite along the stems. They are oval or elliptical in shape, 1 to 3 cm long, and finely toothed along the edges. Numerous, small but fragrant maroon flowers bloom in the spring in clusters at leaf axils along the branches. They produce small, 3 to 4 mm long, egg-shaped capsules that have a thin, white shell with one or two dark brown seeds inside.

#### Habitat

*Skwkwlkwisilmlx* is common and widespread in the Okanagan region at low to mid elevations. It can be found on dry plateaus, and open forests, in clearings, and on warm, gravelly slopes (Parish et al. 1996:72).

#### Uses

❖ This evergreen plant was available for its medicinal properties year round. The branches were boiled in water to make tea for kidney troubles, cold, or tuberculosis (Turner et al. 1980:96).

**Nsvilxcen Name**: nttgtgiknxn

English Common Name: Shrubby Penstemon

**Latin Name:** Penstemon fruticosus

**Primary Uses:** medicine and technology

# Description

❖ This bushy evergreen shrub grows to only 40 cm tall, with reddish, stiff branches. New growth can be distinguished by a covering of fine hairs. Lance-shaped leaves grow opposite one another along the stems. The dark green leaves range from 1 to 6 cm long and may have

smooth or toothed edges. Clusters of pale-lavender to purple tube-shaped flowers, up to 5 cm long, bloom at the ends of flowering shoots.

#### Habitat

This shrub is scattered throughout the Okanagan region at low to subalpine elevations. It prefers dry open forests and rocky hillsides or cliffs, and disturbed areas beside roads (Parish et al. 1996:69).

# Uses

- ❖ This plant provided a strong medicine and had to be prepared with care. For toothache, raw roots were placed directly on the affected teeth. However, if this remedy was used too often, the tooth could be irreparably damaged. A weak infusion was made from the tops of the plant and taken internally for headaches, consumption, colds, flu, and gastrointestinal disorders. Externally, a much stronger infusion was used to wash the face to treat acne and itchy scalp. Syilx peoples used this remedy for their animals as well as for themselves.
- Sometimes people would mash up the leaves and place them inside their moccasins for insoles (Turner et al. 1980:139).

**Nsyilxcen Name:** táwáwygwásýs

Common English Name: Blackcurrant

Latin Name: Ribes nigrum

Primary Use: food

# Description

❖ The blackcurrent species *Ribes nigrum* is a deciduous shrub introduced from Europe and is not native to the Okanagan. It is a tall shrub growing to 1.8 m high. The green, maple-leaf shaped leaves have 3 to 5 pointed lobes with large teeth along their edges. Clusters of greenish-yellow flowers bloom in the spring, which produce hanging clusters of black currents from June to July. They have a strong flavour but are very tart. Usually they are made into jams, juice, or pies, and sweetened with sugar.

## Habitat

- ❖ Blackcurrant shrubs enjoy damp, cool environments with good soil drainage and ample sunlight (Missouri Botanical Garden 2017[h]).
- ❖ The Nsyilxcen name, tányawásýs, refers to Northern Blackcurrant, Ribes hudsonianum, which grows throughout the Okanagan region at low to mid elevations. It can be found in moist to wet environments, such as forests, wet openings, and seepage areas. It differs only slightly in appearance from R. nigrum in that the leaf lobes are rounded rather than pointed, the flowers are white, and the waxy black berries are speckled with resin dots. The berries are bitter and were not a favoured food of syilx peoples (Parish et al. 1996:52).

**Nsyilxcen Name:** *plplqniłmix* 

**English Common Name: Thimbleberry** 

Latin Name: Rubus parviflorus

Primary Uses: food, medicine, and technology

# **Description**

❖ This is an erect, deciduous shrub, standing from 0.5 to 2 m tall. Spreading rhizomes send up new shoots creating dense thickets of this shrub. The stems do not have any spines or thorns. The leaves are large, from 10 to 20 cm across, and resemble maple leaves, except they are quite soft. The edges are finely toothed and both sides of the leaf are coated with fine hairs. From May to July, large, white flowers with five egg-shaped petals each and yellow centres, bloom in clusters of 3 to 10 flowers at the tips of the branches. Clusters of scarlet red, minimally domed, raspberry-like berries ripen from June to August, depending on location.

#### Habitat

❖ This flavourful fruit is common and widespread in low to subalpine elevations in the Okanagan region. The plant does not do well in the arid parts of the region so are found mainly in moist areas in open forests, clearings, and gullies, and near creeks and roadsides (Parish et al. 1996:62; Turner et al. 1980:133).

#### Uses

- Syilx peoples usually enjoyed the berries fresh picked and never dried them.
- For stomach problems, the rhizomes were steeped in hot water and the resultant yellow, tasteless liquid was drunk. For problems with acne, young people would drink a solution of boiled rhizomes for about a week. In springtime, fresh leaves were rubbed on a person's face to clear up the acne.
- ❖ The large leaves were occasionally used to line cooking pits and berry baskets, and were place between layers of berries in a basket to keep them fresh (Turner et al. 1980:133).

**Nsyilxcen Name:** *sx̄wsmiłp* 

**English Common Names:** Soapberry / Soopalallie

**Latin Name:** *Shepherdia Canadensis* **Primary Uses:** food and medicine

## Description

❖ This is a deciduous shrub that grows from 1 to 2 m tall. The erect branches are brown with small brownish spots or scales. Oval, dark green leaves are paired along the length of the branches. They are green on the top surface but the underside appears silvery due to a coating of silvery hairs. Small, yellowish-brown flowers appear along the stems from April to May. These produce bright red, fleshy, bitter berries. The small berries, from 6 to 8 mm across, are very delicate and easily crushed.

#### Habitat

This common shrub is found throughout the Interior regions at low to subalpine elevations. It grows in both moist and dry locations in open forests and clearings Parish et al. 1996:71).

# Uses

Syilx peoples gathered the berries from May to July. They are very bitter but are rich in iron and vitamins and an important addition to the diet. The berries are very soapy when crushed and could be whipped into a light froth called "Indian ice-cream." The bitter froth was sweetened with Saskatoon berries or strawberries. The juice could also be extracted

from the berries to make a refreshing drink. Today, sugar is added to reduce the bitterness. Most often the berries were eaten fresh, but they could also be dried and stored for later use.

The branches were used as medicine for a variety of purposes. A tea made of boiled twigs was an effective purgative, stomach medicine, and a general tonic. This same solution was used as a shampoo (Turner et al. 1980:99-100; Moerman 1999:529).

**Nsyilxcen Name**: *tmtm'ny?ip* 

English Common Name: Common snowberry

**Latin Name:** *Symphoricarpos albus* **Primary Uses:** medicine and technology

## Description

This bushy deciduous shrub grows from 0.5 to 2 m tall and often just as wide. The dull green, oblong to lance-shaped leaves are about 5 cm long, and are sharply pointed at their tips. Small, bell-shaped, pinkish flowers appear in clusters along the ends of the branches from June to July. By the end of the summer to early fall, these have produced clusters of white, berry-like fruits that remain on the stems throughout the winter.

#### Habitat

This small shrub is common and widespread and can be found from low to mid elevations throughout the Okanagan region. It prefers open forests, dry rocky slopes, dry meadows, and disturbed areas (Parish et al. 1996:82).

#### Uses

- ❖ Even though the white berries were considered poisonous to eat, they could be safely boiled together with branches and leaves to make a tea to clean out the body. Men drank a tea of leaves boiled in water to promote urination. Mashed berries were used as a poultice for children's skin sores and to relieve itching. Sore, runny eyes were treated with a liquid made from mashed berries mixed in a small amount of water. An infusion made from the roots was also used as an eyewash.
- The branches were bundled and tied together to make brooms (Turner et al. 1980:95).

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