This guide provides general information about the plants in the na' k' ulam n 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.

t kip
Pine grass or Timbergrass

/ k 2 (-) F

technology

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.

medicine and technology

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).

none provided
Pasture sage / Pasture Wormwood
Artemisia frigida
medicine, technology, and ceremonial

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.

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]).

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 \mathbf{k} ilk \mathbf{l} , makes reference to the red colour of the bracts (Turner et al. 1980:138).

sk

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).

a nwix tn

Wild Buckwheat / Sulphur Flower / Parsnip-Flowered Buckwheat Eriogonum heracleoides

medicine, technology

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.

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])

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

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).

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).

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).

: s x
 Golden Aster
 Heterotheca villosa
 not a culturally important plant to syilx peoples

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.

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)

No known local uses

yititemn p Round-leaved Alumroot Heuchera cylindrical medicine

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-

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

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.

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).

Sm tsn le 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 heiO(i)] TJETeW2-17(e)W*teht m

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).

sma x
Wild Tobacco
Nicotiana attenuata
ceremonial

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).

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).

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 **sma x**. Neither variety has been cultivated (Turner et al. 1980:140).

sx ina

Prickly-Pear Cactus **Opuntia fragilis** and **Opuntia polyacantha**food, medicine, and technology

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.

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]).

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).

cuqcuqm pu

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

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]).

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 **sknirm n** 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).

kix n

False Solomon's Seal Smilacina racemosa food and medicine

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.

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).

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).

: berries - s ya ; bush - s qi p

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 **s ya** is a general term (Turner et al. 1980:120, 122; Parish et al. 1996: 55).

Saskatoon Berry / Serviceberry

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

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).

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).

k I tki p Redstem ceanothus Ceanothus sanguineus medicine and technology

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.

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).

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

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

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).

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).

none provided
Rabbit brush

Ericameria nauseosa (formerly Chrysothamnus nauseosus)
medicine and technology

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**

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.

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).

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).

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