Prairie Urban Garden - Oldman Watershed Council

Xeriscape Priority Plant List

GROUNDCOVERS

Attribute	Response
Common Name	Kinnikinnick or Bearberry
Scientific Name	Arctostaphylos uva-ursi
Origin	Native and native cultivars. The native species is found all across Canada and in the U.S. is common to all the northern and western states. It is considered a northern hemisphere circumpolar species.
Height	20-30 cm (8-12")
Spread	60-90 cm (2-3')
Life Form	Trailing multi-stemmed evergreen shrub possessing small spatulate alternate thickened leaves.
Flower Color	Small pinkish to white urn to bell shaped.
Foliage Color	Dark green alternate leaves with a slightly glossy sheen above; spatulate shaped.
Flowering Period	Spring
Habitat	The native species prefers sandy, acidic soils and full sun to partial shade. It is hardy to Zone 2. The cultivar is a little more forgiving and is more tolerant of alkaline soils. It also prefers well drained soils and should be kept away from having its roots inundated in water. The cultivar however, is reported Hardy to Zone 4. Thus, it is recommended to only plant the cultivar on south to south-west aspects providing full sun.
Maintenance	This is a very low maintenance species. So long it has been planted in a site that allows for its projected spread it is as maintenance free as you can get.
Availability	The native species is typically found as plugs or small containers from specialized native plant producers and nurseries. The cultivar can be obtained in small sized containers and is common to general plant nurseries, but not as common in seasonal garden centers.
Special Notes	The cultivar for this species is called Vancouver Jade Bearberry (<i>Arctostaphylos uva-ursi</i> 'Vancouver Jade"). The native species is slow growing but the cultivar grows faster spreading 30-40 cm per year. Kinnikinnick produces a bright red berry-like structure called a drupe and as the common name would suggest is a favorite forage item for bears.

Attribute	Response
Common Name	Pink or Rosy Pussy-toes
Scientific Name	Antennaria rosea or Antennaria microphylla

Origin	Native and native cultivars. The native species is found all across Canada and in the U.S. is common to all the northern and western states
Height	Vegetation: 5 cm (2") Inflorescence: 10-15 cm (4-6")
Spread	30 cm (12")
Life Form	Mat forming perennial arising from creeping stolons (horizontal stems that run along the surface of the soil).
Flower Color	Pink and creamy white. The plant is from the Aster family and has cream colored disk florets with pink floral bracts; however the pink color dominates and helps explains the plants common name.
Foliage Color	The leaves are all basal and exhibit simple, silvery-green spatulate shaped leaves. The silver color comes from a dense layer of soft silvery grey hairs on the leaf surface.
Flowering Period	Late spring to early summer
Habitat	Pussy-toes do best in full sun. They prefer dry, well drained soils. They are very tolerant of poor soil conditions and are well suited to a rock garden style application. All Pussy-toes (natives and cultivars) are considered very drought tolerant. They are hardy to Zone 2.
Maintenance	This is a very low maintenance plant. It does not even require trimming in the late winter and early spring as do most other plants. It is a slow to moderate growing plant and as such as a ground cover it is very well behaved and should pose no problem in a xeriscape application. Division is easy with these plants; simply break off a portion of the "mat" and transplant it to another part of the garden.
Availability	The native species is typically found as plugs from specialized native plant producers and nurseries. The cultivar can be obtained in small sized containers and is common to general plant nurseries and seasonal garden centers.
Special Notes	Pussy-toes offers are excellent drought tolerant selection to replace a large section of the garden as a hardy groundcover that can even tolerate some foot traffic. They are reported to withstand light to moderate disturbance and treading. Apparently, the flowers during fruit development resemble a cat's furry paws; thus explains its curious common name. The cultivars have retained all of the preferred characteristics that the native species possess. They differ primarily in commercial availability and growth sizes. Antennaria dioica 'minima' grows to about half the size of the species at 2-5 cm (1-2") in height and 15-30 cm (6-12") in spread. The Red Wonder (Antennaria diocia 'Red Wonder') possesses as one would expect from the name a brilliant red flower color and grows to about 5-10 cm (2-4") in height and 30-40 cm (12-18") in spread.

Attribute	Response
Common Name	Hens & Chicks
Scientific Name	Sempervivum spp.
Origin	Non-native cultivars. This selection originated from southern
	Europe.
Height	7-15 cm (3-6")
Spread	30–60 cm (12-24")
Life Form	Dense mat forming perennials.
Flower Color	Red, Pink, Yellow, Purple, White
Foliage Color	Many hues and shades of green, greenish-blue, purple, red etc. The leaves are succulent and typically appear in basal rosettes as
	small linear segments with sharp pointed apexes.
Flowering Period	Summer
Habitat	Hens & Chicks should be grown in full sun. They are not particular to soil conditions so long as it is well drained. Soil fertility is also not a contentious issue; in fact they thrive in poor soils. There are a number of cultivar varieties available to choose from and they are all very well suited to a rock garden and xeriscape application. They are hardy to Zone 2.
Maintenance	These plants require very little to no maintenance. The common name for Hens & Chicks describes the way these plants reproduce. A parent rosette (hen) sends out auxiliary rosettes (chicks) to the side and below itself. When a parent rosette flowers and the bloom dies so does the entire rosette. At this time it is replaced by an auxiliary rosette. Therefore, as an optional maintenance item the spent rosettes can be removed along with the spent flower. This promotes more vigorous growth and provides space for quicker replacement by auxiliary rosettes.
Availability	These cultivars can be obtained in small sized containers and are very common to general plant nurseries and seasonal garden centers. Selecting a specific <i>Sempervivum</i> is not critical; there are so many to choose from the decision should be based on which one best suits your specifics for space, and color palette. Select the appropriate micro-site in your yard and leave the rest to the plant; you will not be disappointed.
Special Notes	The Latin name of <i>Sempervivum</i> comes from Semper ("always") and vivus ("living") meaning "always living". This is in reference to the constant replacement of Hen rosettes by Chick rosettes. The species belongs to the family of succulents or Crassulaceae. They originate from the mountainous regions in the Central Europe and south through the Mediterranean. A favorite of mine is the Sunset Hens & Chicks (<i>Sempervivum</i> tectorum 'Sunset'). It has deep pink flowers and grows to about 10-20 cm (8-12") in height (which includes the flowering stalk) and spreads to 20-30cm (8-12").

Attribute	Response
Common Name	Stonecrop
Scientific Name	Sedum spp.
Origin	Native and non-native cultivars. In Canada the native species is found in Alberta, British Columbia, Saskatchewan, Yukon and NWT. It can be found to the western portion of the U.S.
Height	5-25 cm (2-10")
Spread	30-60 cm (12-24")
Life Form	Low growing dense mat forming perennial
Flower Color	Yellow, pink, and rose
Foliage Color	Succulent green, bluish-green, red and purple leaves
Flowering Period	Early to mid summer
Habitat	Full sun to light shade. Stonecrops are very well suited to a classical rock garden type habitat supported by hot, sunny locations with well drained soils. Many Stonecrops are hardy to at least Zone 3 and some to Zone 2.
Maintenance	Stonecrops required little maintenance. They can be cut back in the fall of the year or late winter-early spring. Only the decadent leaves should be removed. Thus, to avoid conflict with cutting some new shoots in the early spring it may be easier to trim back these short groundcovers in the fall. Most Stonecrops should not require dividing and as a ground cover application should not be expected to. The plant reproduces very easily from cuttings; simply tear off a section or patch of the mat and replant it in another location.
Availability	The Stonecrop cultivars can be obtained in small sized containers and are very common to general plant nurseries and seasonal garden centers. The native Stonecrop is typically found as plugs from specialized native plant producers and nurseries.
Special Notes	The only native commercially available Stonecrop is Lance-leaved Stonecrop (<i>Sedum lanceolatum</i>). This native selection is suitable for xeriscape applications but is not considered as a groundcover. It grows to 5-25 cm (2-10") in height, but only about 5-10 cm (2-4") in spread. One of the best Stonecrops that can be used as a groundcover is the Russian Stonecrop (<i>Sedum kamtschaticum</i>). This is a nonnative selection but grows to 15 cm (6") in height and spreads up to

CO are (QA"). It must be a compatible will be a few about all flowers
60 cm (24"). It produces a very attractive yellow star shaped flower
with orange centers. The leaves of Russian Stonecrop are dark
green and like other Sedums are fleshy and succulent.It is
considered very drought tolerant and is hardy to Zone 2.
A second selection that offers some interesting foliage
characteristics is the Dragon's Blood Stonecrop (Sedum spurium).
The leaves emerge red and then slowing change to green with red
edges and then returns to a deep red color in the fall. The flower is
also a very nice cherry red color and is star shaped. It grows to
about 10 cm (4") and 45 cm (18") in spread. This is a Zone 2 hardy
cultivar.
A final selection to consider is the Blue Spruce Stonecrop (Sedum
reflexum). This species produces blue green succulent leaves
arranged in a similar fashion to spruce tree needles. It develops
yellow flowers in midsummer and establishes to 20 cm (8") in height
and 38 cm (15") in spread. It is hardy to Zone 2.

Attribute	Response
Common Name	Creeping & Common Juniper
Scientific Name	Juniperus horizontalis & Juniperus communis
Origin	Native and native cultivars. Common Juniper is found throughout
	Canada and most of the U.S. It is circumpolar and is one of the
	most widely distributed species in the world. Creeping Juniper is
	wide spread in Canada; extending coast to coast and is found in
	the mid northwest and northeastern U.S.
Height	10– 30 cm (4–12")
Spread	1.0 - 2.5 m (3–8')
Life Form	Spreading low mounding coniferous (evergreen) shrub.
Flower Color	Produces a bluish with white bloom berry-like reproductive
	structure (cone equivalent).
Foliage Color	Green, blue, chartreuse, golden- yellow, silver-blue, bluish-green
Flowering Period	No significant ornamental value.
Habitat	Junipers as a whole prefer full sun with tolerance to partial sun.
	They do best on well drained soils and are considered very drought
	and chinook tolerant. They range in hardiness between Zones 2 –
	4; thus if you select a Zone 4 species of Juniper ensure you only
	plant it on a south to south-west aspect.
Maintenance	Spreading Junipers are available in a number of different sizes and
	so long as you have selected the right species to fit your specific
	site requirements they should not need any pruning to speak of;
Associate iliter	there as low maintenance as a plant species can be found.
Availability	The native species of Common Juniper can readily be found in
	small containers from specialized native plant producers and
	nurseries. However, Alberta's other native spreading Juniper- <i>J. horizontalis</i> is a much harder find and is less common.
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	Fortunately, there are a number of cultivars from this species that can be used in place of the native <i>J. horizontalis</i> and are commonly available. The cultivars and non-native Junipers are very common to our local general plant nurseries and season garden centers. They can be purchased in various sized containers.
Special Notes	If you are looking to replace your grass sod or just a portion of it, spreading Junipers are an excellent choice. They can be used as border plants to define or edge pathways, create elevation and structural interest, and can provide differences in foliage texture and color by the right selection of varying species.
	There are essentially 5 species of Juniper and a number of related varieties that are commonly found and used in landscaping applications in Alberta. J. horizontalis and J. communis are native to Alberta while J. sabina is native to Europe and Asia. J. chinensis and J. squamata are native to China, Mongolia, Japan and Himalaya. The non-native cultivars have a range of growth between 30 cm – 1.2 m (12"-4") in height and spread to about 1.2 - 3.0 m (4–10").
	The Prince of Wales Juniper is a cultivar variety of <i>Juniperus horizontalis</i> . It has green foliage and grows to about 20 cm (8") in height and spreads to 2.5 m (8'). The Alpine Carpet is a cultivar variety of <i>Juniperus communis</i> . It too has green foliage but it is needle-like rather than the scale-like foliage of <i>J. horizontalis</i> . It grows to 30 cm (12") in height and spreads to 1.5 m (5'). A popular selection of the non-native spreading Junipers is Calgary Carpet (Juniperus sabina 'Monna'). It has green scale-like foliage and grows to 30 cm (12") in height and spreads to 1.5 m (5').

Attribute	Response
Common Name	Moss Phlox or Creeping Phlox
Scientific Name	Phlox subulata
Origin	Native and native cultivars. This selection of Moss Phlox originates from eastern Canada and U.S. It extends from Manitoba eastward. The common native Moss Phlox species found in western Canada and U.S. is called Hood's or Carpet Moss Phlox (<i>Phlox hoodii</i>).
Height	5-15 cm (2-6")
Spread	30-45 cm (12-18")
Life Form	Creeping, tufted or mounded, mat-forming perennial. Mass this selection together to provide and dense, full groundcover.
Flower Color	Pink, lavender, red, pale blue, and white.
Foliage Color	Green needle-like "evergreen" foliage. The needle-like leaves are

	awl-shaped (curved like an anvil) and appear similar to those of
	Common Juniper (<i>J. communis</i>).
Flowering Period	Spring; May to June
Habitat	Full sun to light shade. One of the best features of Moss Phlox is the abundant flower profusion it produces in the Spring and this characteristic is be satisfied by full sunlight conditions. Moss Phlox prefers dry and well drained soils. They do best in sandy or gravelly textured soils. Most Moss Phlox cultivars are hardy to Zone 2.
Maintenance	This selection will only require slight maintenance in order to keep it in optimal condition. In the late winter, early spring season trim back the "evergreen" foliage back one- third. Do not cut this selection back to ground level. The trim will improve plant vigor and create more of a dense mounded appearance. If you prefer you can lightly shear the plant after it has completed flowering in early summer to encourage the foliage to become denser.
Availability	The Moss Phlox cultivars can be obtained in small sized containers and are very common to general plant nurseries and seasonal garden centers. Our Alberta native Moss Phlox species are unfortunately not commercially available.
Special Notes	In Alberta we have two native species of Moss Phlox (<i>Phlox hoodii</i> and <i>Phlox alyssifolia</i>). The <i>Phlox hoodii</i> is the more common of the two and can easily be found in grassland/prairie habitats. It is one of the first early spring white flowers in bloom. <i>Phlox subulata</i> is a native species to mid - eastern United States. A popular blue-lavender flowered variety is the Emerald Cushion Blue. It grows to about 10-15 cm (4-6") in height and spreads to 45-60 cm (18-23"). A pink flowered variety is Millstream Daphne that grows to 5-10 cm (2-4") in height and 30-45 cm (12-18") in spread. Both species are hardy to Zone 2 and are very drought tolerant. An interesting selection that is suitable for the shadier areas of the garden is Woodland Phlox (Phlox divaricata). This is another mideastern US native Phlox species suitable for those partly shady sites; too much shade will significantly decrease that amount of blooms. The species grows to about 20 cm (8") and spreads to 45 cm (18"). They are hardy to Zone 3. It should be noted there are taller species of Phlox that can be found in the gardens centers called Garden Phlox (<i>Phlox paniculata</i> spp.). These species and their related cultivars are fine in their own right, but are not suitable as a groundcover like the Creeping or Moss Phlox (<i>P.subulata</i>).

Attribute	Response
Common Name	Western Yarrow
Scientific Name	Achillia millefolium

Origin	Native and native cultivars. The native species is commonly found throughout all of Canada and U.S. It is a circumpolar species.
Height	70 cm (27")
Spread	60 cm (24")
Life Form	Mounded, spreading herbaceous perennial
Flower Color	A member of the Asteraceae family with creamy to white ray florets and tan disk florets in the center. Cultivars have yellow, rose and red flowers.
Foliage Color	Green with soft grayish-white woolly dense hairs on highly dissected fern-like leaves.
Flowering Period	Early to late summer
Habitat	Western Yarrow and its cultivars prefer full sunlight but are tolerant of partial shade. They are very drought tolerant and can be located in those hot, dry parts of the garden. Yarrow will do well on moist soils, so long as they are well drained. They are hardy to Zone 2.
Maintenance	In the right application Western Yarrow requires only a moderate level of maintenance. The previous year's growth is best cut back to ground level each year before spring green-up. Most of the desiccated leaves will break apart and remain on the ground over the winter but the stems & branches can be clipped and removed easily. In the summer months the flowers can be deadheaded to extend flowering and modest pruning to maintain a tighter clumping appearance.
Availability	The native species is typically found as plugs from specialized native plant producers and nurseries. The cultivars can be obtained in small sized containers and are common to general plant nurseries and seasonal garden centers.
Special Notes	I think Western Yarrow is befitting the phrase "there are no bad plants only those misplaced". In other words, the plant itself is not the problem but rather the location of where it was planted and the use or application was incorrect. In nature Western Yarrow is not a problem or threat. However, if it is not properly bordered or contained by some form of hardscape or other dominate vegetation it can spread and become a problem in areas that it was not intended for. As a groundcover application you can take advantage of its spreading nature and put it to good use. But, even with the correct application you still need to provide some form of containment. For example, shut off its potential spread by planting a contiguous group of large bunch grasses in its way. This will halt its advance and you can then just enjoy the scenery. Two popular cultivars of <i>Achillea millefolium</i> that have equal growth potential (60 cm (24") in height and 60 cm (24") in spread) are the Moonshine and Paprika Yarrow. The Moonshine produces yellow flowers whereas the Paprika has bright red ray florets with pale yellow disk florets.

The Cerise Queen has the same spread as the previous two but is a
taller variety at 81 cm (32"). It is produces a vibrant cherry-pink
colored flower. All three of these cultivars are hardy to Zone 2 and
prefer dry, hot full sunlight conditions with well drained soils.
If you are looking for a variety of Yarrow to fit those small spaces or
rock garden you might consider Woolly Yarrow (Achillea
tomentosa). This dwarf variety is non-native, originating from S.
Europe and W. Asia. It produces yellow flowers and grows to only
15-20 cm (6-8") with a spread of 20-30 cm (8-12"). This species is
hardy to Zone 3.

Attribute	Response
Common Name	Thyme
Scientific Name	Thymus spp.
Origin	Non-native, originating from Southern Europe and Mediterranean.
Height	2.5–15 cm (1– 6")
Spread	15 - 60 cm (6-24")
Life Form	Prostrate spreading herbaceous perennial; a member of the Mint family.
Flower Color	Purple, pink, or white.
Foliage Color	Green or variegated green with white or yellow highlights; tiny ovate to round evergreen leaves.
Flowering Period	Late spring to early summer
Habitat	Thyme species require full sunlight conditions. They actually prefer poor to average soil conditions; but need well drained soils. Once established they are very drought tolerant and as a genus are considered hardy to Zone 2.
Maintenance	These are relatively easy plants to maintain, and require only a minimal amount of assistance to keep them in optimal condition. After flowering they should be sheared back about one third; this increases the vigor of the plant by promoting new vegetative growth and prevents the plant from getting too woody. They are well known for their ease in propagating from division. These are relatively shallow rooted plants and only a small piece or section of the "mat" needs to be broken off to start a new colony of plants.
Availability	Thymus cultivars can be obtained in small sized containers and are very common to general plant nurseries and seasonal garden centers.
Special Notes	As a member of the Mint family <i>Thymus</i> is a pleasantly mild aromatic plant; especially when the leaves are crushed or in flower. <i>Thymus</i> can be applied to many sites as a groundcover or overhanging the edges of rocks & borders in a rock garden. However, a notable and favorable characteristic of Thyme is it's tolerance to treading. Thyme can tolerate moderate to heavy foot traffic. Therefore, they are perfect to fill in the spaces between

paving stones and flagstone type pathway applications.
There are many species of Thyme that will provide you with these
positive attributes, including: <i>Thymus</i> serpyllum, <i>T.</i>
pseudolanginousus, and T. praecox. These species include a
number of varieties to choose from. Woolly Thyme (T.
pseudoloanginousus) is very common and produces a pink flower
with green-silver leaves reflecting dense woolly hairs on the leaf
surface. It grows to 5-10 cm (2-4") in height and spreads to 30-45
cm (12-18"). A purple flowered species is the Creeping Thyme or
Mother of Thyme (T. serpyllum). It has dark green leaves and
grows to 7.5–15 cm (3-6") in height and spread.

Attribute	Response
Common Name	Lamium, Deadnettle or, Spotted Deadnettle
Scientific Name	Lamium maculatum
Origin	Non-native cultivars, originating from Europe & Asia
Height	15– 30 cm (6-12")
Spread	30-60 cm (12-24")
Life Form	Low growing, creeping herbaceous perennials.
Flower Color	Pink, purple, or white
Foliage Color	Deep green, silver or variegated
Flowering Period	Late spring to late summer
Habitat	Lamium prefers partial to full shade locations. In the shade these
	cultivars are considered drought tolerant; simply because the
	shadier micro-sites are more mesic by nature. They can tolerate
	sunnier locations, but these are often associated with dry and hot
	conditions; not recommended for Lamium. The species L.
	maculatum is hardy to Zone 2.
Maintenance	These are relatively low maintenance selections whereby they can
	be left to their own or you can prune/trim them to get the most out of
	their potential. After they flower the plants can be sheared to
	promote new growth and trimming can occur throughout the
	summer season to maintain a neat appearance; they are not
A 11 1 114	specific to season of pruning.
Availability	Lamium cultivars can be obtained in small sized containers and are
	very common to general plant nurseries and seasonal garden
0 1111	centers.
Special Notes	This Mint family selection has been included because it obviously
	serves as a groundcover, but more significantly it provides a dry,
	shade selection. Many mature yards undergoing a xeriscape
	retrofit have well established trees and shrubs that provide

Attribute	Response
Common Name	Three-flowered Avens , Prairie Smoke, or Old Man's Whiskers
Scientific Name	Geum triflorum
Origin	Native and native cultivar. In Canada, the native species is found throughout all of the western provinces, Yukon & NWT, and
	southern Ontario. It is common to the northern and western states of the U.S.
Height	Vegetation: 38 cm (15") Flower: 60 cm (24")
Spread	30 cm (12")
Life Form	Low mounding, spreading herbaceous perennial.
Flower Color	A member of the Rose family it produces yellowish-cream colored petals and reddish-rose sepals. The sepals dominate and thus provide an overall red appearance.
Foliage Color	Fern-like, light blue-green leaves covered with soft hairs. They have a combination of numerous basal leaves and short stalked stem leaves. The leaves are attractive oblong to egg shaped, with wedged shaped segments along its length.
Flowering Period	Late spring to mid summer
Habitat	Full sun to light shade. Loamy to sandy soils, well drained. Prefers hot and dry locations, very drought tolerant. In nature found in dry to moist grasslands, rocky slopes and open forests. Hardy to Zone 2
Maintenance	This is a low maintenance selection. The spreading nature of this species is well behaved (slow to moderate) and would be suitable in

	many garden applications; borders, accent, rock gardens and groundcovers. This is a low maintenance species that needs only to be cut back to ground level in late winter or early spring; before any signs of green-up.
Special Notes	This plant at present is commercially available in both native and native cultivar forms. However, it is not as common as it should be in the nurseries and garden centers. This is a plant that needs a closer look and simply requires increased demand to improve supply. The scientific species name of "triflorum" refers to the presence of three flowers appearing on this plant's inflorescence. The reference to Prairie Smoke and Old Man's Whiskers in the common name relates to the smoky-grey color of the pistils in the late flowering stage. They resemble a grey beard or when the plant appears in large masses on the grasslands appear as smoke over a mass of burning embers. The cultivar is called Prairie Smoke Avens (<i>Geum</i> 'Prairie Smoke'). It is similar in appearance, habitat requirements and growth potential to the species; however slightly less hardy than the species @ Zone 3.