SASKATOON TREE TOUR

SOS TREES
COALITION

SOS Trees Coalition Inc. is a non-profit organization which strives to protect and expand urban forests in the towns and cities of Saskatchewan, focusing on Saskatoon. We were founded in 1992 by people concerned about the fatal threat to the American Elm from Dutch Elm Disease (DED), which had invaded southeast Saskatchewan at that time. Through public education and lobbying the Province and the City we helped to control the spread of DED. Saskatoon has an estimated 100,000 American Elms but only a few cases of DED were recorded from 2015 to 2023. In 2024 that number jumped to 11, spread among three neighborhoods. **DED is here** - we are redoubling our efforts to work with residents, the City and others in a collective fight to control its spread. **See page 42 for more details.**

SOS Trees Coalition also works to counter other threats to the urban forest, including climate change, infill construction, invasive insects and diseases. We promote public awareness and appreciation of the many benefits that a healthy urban forest provides to everyone. Our goal is to ensure that our urban forest will be here for many generations to come. We speak for the trees, through public education, tree planting events, and lobbying our local and provincial governments. Our early efforts helped to convince Saskatoon to improve its pruning cycle for mature public trees from once in 50 years to once in seven. More recently, we successfully advocated for a new Tree Protection Bylaw and a rewriting of specifications for working around public trees. Our education initiatives include Arbour Week and tree planting events.

Trees are an important part of our community with all of their benefits contributing to a liveable city. If you are moved by their collective value and beauty, and you want to do something for the trees – JOIN US!

- SOS Trees Coalition membership is only $20.00 per year!
- Student memberships are free
- We are a registered charity
- For more information, visit sostrees.ca
- E-mail us at trees@sostrees.ca
- Write to us at:

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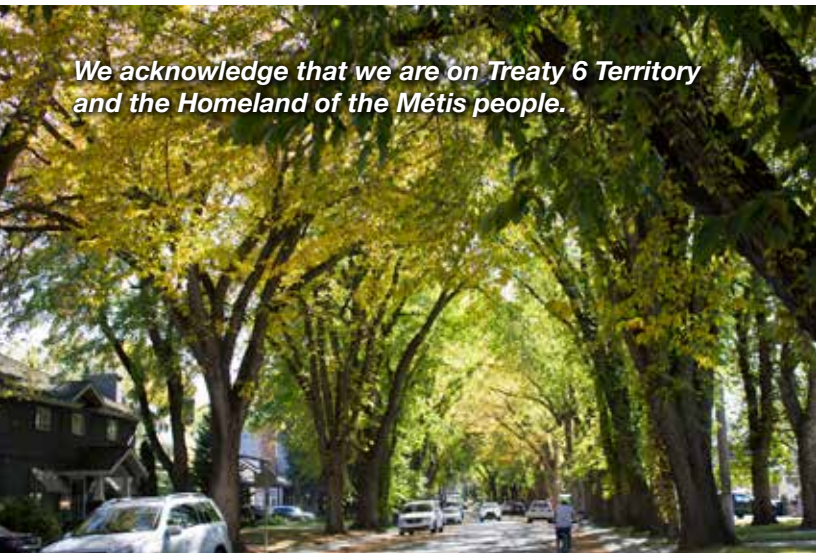
URBAN TREES MATTER

Cities have higher temperatures, more greenhouse gas emissions, worse air quality and more noise pollution than rural and natural areas. Planting and caring for trees on public and private property can help mitigate these problems.

Studies have shown a mature urban forest improves residents health and well-being, benefits the environment, increases property value, can save us money and even reduce crime rates.

THE BENEFITS OF TREES

- reduce noise, dust and air pollution
- protect us from dangerous ultraviolet radiation
- reduce wind speed protecting people and property
- sequester carbon dioxide mitigating climate change
- add beauty and give character to communities
- improve physical and mental health
- prevent both wind and water erosion
- reduce storm-water runoff by holding moisture in the soil
- provide habitat for birds, insects and other animal species
- provide food such as fruit and nuts
- reduce heating and cooling costs and increase humidity
- increase the value of real estate
- enhance economic stability by attracting businesses; people linger and shop longer on treed streets



TAKE THE TREE TOUR!

Welcome to the 2025 edition of the Saskatoon Tree Tour – a guide of impressive species growing in our city. We hope that showing you these special trees will increase your knowledge and appreciation of our urban forest as a whole.

Tree locations and species are numbered on the CONTENTS list and correspond with the green dots on the map. We have included trees from various neighbourhoods throughout Saskatoon and added alternate locations for the majority of the trees. Alternate locations are indicated with dark red dots. Efforts have been made to find mature and thriving examples of 27 species to show the long term potential of these beautiful trees. We hope this tour will inspire you to learn more about the trees in Saskatoon's urban forest and provide ideas for new trees to try in your yard.

Five Saskatoon "tree destination sites" are also included in this book. These sites feature a spectacular number of tree species and are well worth taking the time for a dedicated visit.

- University of Saskatchewan Campus
- Woodlawn Cemetery
- Patterson Garden Arboretum
- Richard St. Barbe Baker Afforestation Area
- Innovation Place
- Forestry Farm

Enjoy your tour!

1 MOUNTAIN ASH

1016 2nd Street E.

American Mountain Ash *Sorbus americana* is native to eastern North America and has been planted here as an ornamental. The similar European Mountain Ash or Rowan *S. aucuparia* was introduced as an ornamental species in North America where it has naturalized very successfully.

Contrary to what the name suggests, neither are ash trees, but are in the rose family along with crabapples and cherries. In spring creamy white flowers form large, flat-topped clusters. The ripening of their brilliant red berries provides a colourful display that starts in late summer and persists into the winter. The berries attract hungry birds such as robins, jays, and waxwings. Mountain Ash berries and bark were used as medicine by Indigenous peoples. The wood is easily bent and was used for canoe frames and snowshoes.

Odd Pinnate Leaf

409 Hilliard Street E.

American Linden *Tilia americana* also known as Basswood, is native to Canada, growing as far west as Manitoba. It has heart shaped leaves and paired nut-like fruits that hang from an elongated leaf-like structure. The cream-coloured midsummer flowers produce a notable sweet fragrance that lasts for a few weeks until they are fertilized. The nectar from the flowers is a very important source of food for flying insects such as honeybees and butterflies. This tree has been appreciated from Europe to North America for its many attributes. The inner bark has long interwoven fibres that peel easily and were used by Indigenous peoples to make rope, thread, mats, and even clothing. The thicker fibres were used to make snowshoes and fishing nets. Its soft wood allowed for easy carving and shaping of masks and sculptures. When boiled or crushed, the bark, leaves and stems provided poultices and teas for many ailments. Several other types of Linden, such as the Little Leaf Linden *Tilia cordata*, (which has a smaller leaf), are found throughout the city. Often they can be recognized from a distance by their pyramidal form. They make good ornamental trees for street plantings and landscapes as they have few insect and disease problems.

Cordate (heart shaped) Leaf

3 MANITOBA MAPLE

848 Saskatchewan Cres. E.

Commonly named Manitoba Maple or Boxelder, this *Acer negundo* has phenomenal lateral branches that extend over most of the home's front yard. It is a fine example of the natural form that trees can develop if left to their own devices, albeit with some support for long low limbs! Saskatoon has other really unique character Manitoba Maples like this one.

Low branching habit if not pruned

The Manitoba Maple is native to North America and has been introduced and has naturalized in Europe, China and Australia. Here in Saskatchewan it once was popular for planting on streets and in parks. The red stained grain of the wood makes it desired by woodworkers — particularly the burls that can appear on some trunks (view tree at alternate location). Indigenous peoples of western North America used Manitoba Maple for multiple purposes, including tools,medicines, ceremonial objects, incense, food, and even flutes. They made syrup from the sap, which is still done today by First Nations and Metis peoples in Saskatchewan. The Manitoba maple grows quickly but has a fairly short life span of about 60 years. Female trees produce many seeds.

Compound leaf

Alternate location 1112 Ave. C N.

2513 Haultain Ave.

Needles 1-3 inches in bundles of two.

Scots Pine *Pinus sylvestris* is native to Europe and Asia. It once covered much of the Scottish Highlands, but overcutting for timber and overgrazing by sheep and deer over the past few hundred years decimated the once great pine and birch forests. The Scots pine is the most widely distributed pine tree in the world and was introduced to North America as early as 1600. The wood is used for pulp and sawn timber products. Scots Pines are also planted as ornamentals, for erosion control and for Christmas trees. Easily recognized by the peeling bark that reveals an attractive orange inner layer, the Scots Pine is pyramidal when young, becoming round topped and irregular with age. It was distributed by the PFRA (Prairie Farm Rehabilitation Administration) as a shelter belt tree for farmyards and is one of the hardiest evergreens for the prairies. Significant stands of these trees can be found in the westerly portion of the St. Barbe Baker Afforestation area.

4 **Alternate location** Heritage tree row along Atton Cres. in Evergreen neighbourhood.

5 PLAINS COTTONWOOD

231 - 8th Street E.

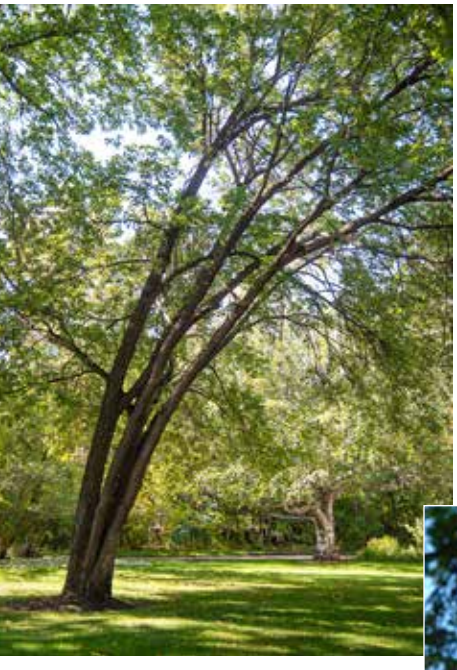
This Plains Cottonwood *Populus deltoides* is one of the largest trees in the city. Its diameter is over 5 feet at 4.5 feet above ground level. Native to the flood plain zones of prairie rivers, the Plains Cottonwood extends as far north as the Cumberland Delta. The source of its common name is apparent in early summer when huge amounts of its fluffy, cotton-like seeds cover the ground like snow. This is one of the reasons these trees are no longer planted in the city. They also grow much too large for urban spaces and have far reaching root systems. Cottonwoods are extremely fast growing and often short lived; however some like this specimen can live to be over 100 years of age.

The Cottonwood is a true sentinel of southern Saskatchewan. Solitary trees or groves can be seen from afar. The pioneers were always glad to see these grand sentinels on the vast prairie, as they provided wood and shade to weary travellers. They were planted along fields and on homestead sites to rapidly provide shelter from the wind and sun. Indigenous peoples used the inner bark which contains salicin as an antirheumatic drug, and as a disinfectant and antiseptic. Wildlife find homes in the hollows and cavities of trunks, and deer browse their branches. Beaver appreciate their close vicinity to water and use the young trees as a food source and for dam building.

Cordate with Dentate margin (symmetrical teeth)

Alternate location Natural stands between Meewasin Park picnic site on White Swan Cres. and the River

333 Saskatchewan Cres. W.



This Common Hackberry *Celtis occidentalis* is a member of the elm family rarely seen in Saskatoon. It has become a popular alternative to the American Elm in communities where the once ubiquitous American Elm has been wiped out by Dutch Elm Disease. The hackberry is immune to that disease, and is well suited to urban environments because

it is hardy and adaptable to a wide range of conditions. However, it seems to grow very slowly in our region, which is probably why few have been planted in Saskatoon. Hackberry is native to the Great Lakes–St. Lawrence Forest Region of eastern Canada and the south shore of Lake Manitoba. In the US it occurs from the northeastern states to the Great Plains. The Common Hackberry is easily distinguished from Elms by its cork-like bark with wart-like protuberances. The sweet, nutritious fruits of the Hackberry are eaten by small mammals and birds. The wood is heavy but soft, and has little commercial value.

Aristate with Dentate margin

7 NORWAY SPRUCE

528 Wilson Cres.

The Norway Spruce *Picea abies* is one of the most widely planted spruces, both in and outside of its native range of Europe. Less common in Saskatoon than other spruces, it is popular in southeastern Canada and in the USA. Widely grown for Christmas trees, it has very unusual secondary branches that hang down like drooping tinsel. It also has cones that are long and pendulous.

The Norway Spruce is used in forestry for timber and paper production. It is the source of spruce beer, which was once used to prevent and even cure scurvy, as it is a good source of vitamin C. Its shoot tips have been used in the traditional Austrian medicine internally (as syrup or tea) and externally (as baths, for inhalation, as ointments, or as resin application) for treatment of various disorders and infections.

The cones are very large. The needles are dark green with white bands underneath, short (1.5 to 2.5cm) and pointed but not sharp. The shoot is orange and like all Spruces each needle is attached to the shoot with a small wooden peg.

between 214 and 216 Poplar Cres.

American Elms *Ulmus americana* are loved for their graceful vase-shaped form with branches spreading upward and outward to form an umbrella-like canopy. Native to North America, they proved to be an ideal urban tree, able to tolerate stresses such as compaction and root disturbance from nearby construction. They became the most popular tree to be planted in the booming cities of the 19th and early 20th century, including Saskatoon, which now has about 28,000 city-owned and thousands of privately owned elms. They create a cathedral like ceiling over many of the streets of our older neighbourhoods and are featured in Woodlawn Cemetery, many older parks and in private yards. Thriving in our climate, they can live up to 300 years or more and can reach 80 feet or higher. Unfortunately, they have no resistance to Dutch Elm Disease (DED).

Native to Asia, DED was accidentally introduced from Europe to Ohio in 1928. It quickly spread, devastating both natural and urban American Elms across the USA and eastern Canada. Reaching Manitoba by the 1970s, it's now in Saskatoon, threatening to destroy a large portion of the urban forest in our older neighborhoods. The critical lesson to be learned is the importance of planting a variety of species on our streets, parks, and private landscapes.

Asymmetric with double serrate margins

For more information on DED and how to help prevent its spread see page 42.

8 **Alternate location** Across from 1214 Ave. P S. – near wall of Gordie Howe Sports Complex

9 BUTTERNUT

438 6th Street E.

The nut is encased in a green of husk the size of a small lime.

Butternut *Juglans cinera* is a fast-growing tree closely related to and resembling Eastern Black Walnut *Juglans nigra*. Butternut, aka White Walnut, is a sun loving tree that grows rapidly and is tolerant of various soil conditions, although it prefers well drained soil. The butternut tree grows to a height of 40 to 60 feet, has a rounded crown and is an excellent shade tree relatively free of diseases. It has gray-brown bark that is deeply furrowed and divided into ridges when mature. The leaves are pinnately compound, with 11 to 17 leaflets that are 2 to 4 inches long. They turn a bright yellow in the fall. It is native to eastern Canada and northeastern USA and has an edible nut that is high in omega-3 fatty acids, an important food for wildlife and humans. Butternut wood is cherished for fine furnishings, panelling, carving, and wood turning. Its bark, roots, nut oil and husks have medicinal qualities for treating a range of problems from arthritis to high cholesterol.

411 Glasgow Street

Large lobed leaves

Throughout history the Oak has been a symbol of strength and durability. With attributes like a long taproot for stability, a stout trunk with graceful spreading branches, and its high quality wood, it is often referred to as the “King of Trees”.

There are about 600 species of oak worldwide, but only 11 are indigenous to Canada. The only one that excels in our prairie climate is the Bur Oak *Quercus macrocarpa,* which extends from southeast Saskatchewan to New Brunswick and south to the Gulf of Mexico. You can easily identify the Bur Oak by its distinctly lobed leaves. Look for the acorns that are the largest of all native oaks, which are a favourite food of squirrels and other wildlife. The name comes from the fuzzy bur-like fringe on the cup or cap that encloses the acorn. Bur Oak is tolerant of city conditions and is a great choice for parks and streets where there is room for a large tree.

 Alternate location 6 and 14 Weir Cres.

11 SILVER MAPLE

1640 - 9th Ave. N.

The Silver Maple *Acer saccharinum* has a leaf that is deeply lobed, more like a "Canadian" maple leaf than that of our native Manitoba Maple. When it's windy, you can see the silvery, shimmering underside of its leaves that give the tree its name. The autumn colour is less pronounced than in many maples, generally ending up a pale yellow. Although some specimens can produce a more brilliant yellow.

Typical maple leaf shape with silvery underside.

Younger trees have a distinctive smooth light-grey bark. As they mature, the bark becomes rough with long ridges. The flowers are in dense clusters, produced before the leaves in early spring, with the seeds maturing in early summer.

The Silver Maple is a native tree found on wet sites in mixed and deciduous forests throughout eastern North America, where growth is rapid and it can live to 130 years or more. It produces a sweet sap which is not used for commercial syrup because its sugar content is lower than in other maple species. Although only marginally hardy on the prairies, these maples continue to be successfully planted and are enjoyed as large ornamental shade trees.

2628 Munroe Ave.

The Siberian Fir *Abies sibirica* is an extremely hardy spire-shaped evergreen. Very resistant to frost, it can survive temperatures of -50°C, which makes it one of the most cold hardy trees known. It has dark green foliage year-round with needles that are soft, flattened, and strongly aromatic. This fir tree is distinguished by its blue cones which disperse seeds.

Native to Russia, Kyrgyzstan, Kazakhstan, Mongolia, and China, it occurs from near sea level to 2,000 metres in the mountains.

Atmospheric pollution severely affects Siberian Fir and stands of such trees can be used to gauge the level of pollution in a given area.

There are many therapeutic properties associated with Siberian Fir including anti-fungicidals and anti-bacterials. It also has an antiseptic used for flu and colds. Essential oils come from the needles as well as the cones, twigs and roots.

The needles are small, flat and soft.

13 OHIO BUCKEYE

1306 Cascade Street

The Ohio Buckeye *Aesculus glabra* makes a wonderful shade tree with its dense rounded canopy that often spreads as wide as it is high. This tree gets its name from its green prickly fruit that encloses a dark glossy seed with a light circular patch that looks like a “buck’s eye”. Considered to be poisonous to humans, the nuts are relished by squirrels. Indigenous peoples boiled the nuts to remove the toxins before eating.

Distinctive palmate shape leaf, green prickly fruit enclosing dark glossy seed.

The Ohio Buckeye has showy white upright flowers that appear in early spring. Its distinctive palmate compound leaves have 5 oblong leaflets, resembling an outstretched hand. Its foliage turns a beautiful orange in the fall. Related to the European Horse-chestnut (Aesculus hippoccastanum), it occurs naturally in only one place in Canada – Walpole Island in southern Ontario. Not surprisingly, it is the state tree of Ohio. It is so popular there that sweet treats, sports teams, companies, and even the citizens of the state are named after the buckeye.

The scientific name Aesculus relates to Aesculapius, the mythological Greek god of medicine and the alleged healing power of the buckeye nut. It is believed to cure rheumatism, and to bring wisdom and good luck.

2301 Haultain Ave.

This beautiful backyard tree is best viewed from around the corner over the fence. Very rare in Saskatoon, the Amur Corktree *Phellodendron amurense* is native to eastern Asia. It gets its name from its bark which is uniquely ridged and slightly spongy or corky to the touch.

It is used in traditional medicine in China, India and Japan and has a unique bright neon yellow inner layer. Its bark should not be confused with cork for wine bottle stoppers and other uses which comes from the bark of the Cork Oak *Quercus suber*, an evergreen oak native to southwest Europe and northwest Africa. The Amur Corktree was introduced to North America as an ornamental shade tree in 1856. Male and female plants are separate (dioecious) and each bears hanging panicles of yellowish- green flowers from May through June. It tolerates drought and a wide range of soil conditions, and produces an abundance of fruit. Those attributes have caused it to be considered invasive and in need of control in some northeastern US states. In our climate it is borderline hardy and not likely to cause that sort of problem.

Even Pinnate

14 **Alternate location** 44 Campus Dr., Toxicology Centre, east side of building

15 GREEN ASH

2210 McKinnon Ave.

Odd Pinnate

Green Ash *Fraxinus pennsylvanica* is native to Saskatchewan and became popular as a street tree when the threat of Dutch Elm Disease led to diversified planting of species other than American Elms. A bit shy in showing its foliage, it is one of the last trees to leaf out in the spring, and one of the first to lose its leaves in the fall. That helps to explain its tough, hardy, drought-tolerant nature and its ability to survive Saskatchewan winters. Ash was used by the Cree to make bows and snowshoes. Later it became popular for tennis rackets, hockey sticks, lacrosse rackets, and furniture.

Close relatives of the Green Ash, Black Ash *Fraxinus nigra* and Mancana Ash *Fraxinus mandshurica "Mancana"* were planted in the Saskatoon as an alternative to the green ash. However, these trees were severely decimated in recent years by the Cottony Ash Psyllid, a small, winged insect that feeds on the leaves of ash trees and can cause significant damage or mortality.

302 Douglas Cres.

The Swiss Stone Pine *Pinus cembra*, has soft, fine-textured needles in bundles of five and violet coloured cones. Unlike other pines, the Swiss Stone Pine retains its branches and needles which remain dense and thick right down to the ground through most of its life. It is unfortunate this tree is seldom seen in Saskatoon because it is a fine landscape component and it does well in our climate. However, it has a reputation for being very slow growing, and does not transplant well as a large tree. But good things are worth the wait and this tree is a true beauty. Native to the mountains of central Europe, it is well known for its high quality wood and edible “pine nuts”. The sweet earthy scent of Swiss Stone Pine has long been known to have positive effects on human well-being. This restorative quality has made its wood popular as furniture and paneling in homes, and in aromatherapy.

Long soft needles in groups of 5

17 SIBERIAN SILVER WILLOW

2216 Preston Ave. (on Adelaide St.)

Lanceolate shape, bluish green

Siberian Silver Willow *Salix alba 'Sericea'* also called the White Willow, is native to central and southern Europe and was brought to North America by settlers in the 1700s.

This dense billowy tree has blue-grey or green-grey foliage. It is fast growing and therefore also weak wooded. A windy day can often leave twigs and branches littering the yard. It can grow to 80 feet tall and nearly as wide. In spring, yellow flowers emerge which attract bees, beneficial insects, birds and butterflies. This makes it an excellent addition to a pollinator garden. It grows well in sun or dappled shade and while it is drought resistant once established, it does best in moist soil. It has long silky hairs on both sides of its 3-4" leaves and on the catkins.The catkins remain on the tree for much of the summer.

The ancients of Europe and China knew that White Willow bark could ease aches and pains and reduce fevers. The bark, leaves, and shoots are often used as medicine, even today. The active extract of the bark, called salicin, was isolated to its crystalline form in 1828. Acetylsalicylic acid (ASA) or aspirin is a chemical derivative of salicin.

822 Avenue T N.

The Douglas-fir *Pseudotsuga menziesii*, is a rare tree growing in Saskatoon. Native to the Rocky Mountains and the west coast of North America, Douglas-fir can grow to be almost 300 feet tall and survive for over 1,000 years. The bark of old mature trees can be up to 60 cm thick. It is not a true fir, so its common name is often hyphenated. Its cones are 3 to 4 inches long and are easily identified by the three pointed bracts (modified leaves) which are longer than the cone scales.

Due to its strength and availability in large dimensions from old-growth forests, Douglas-fir is one of the finest timbers for heavy structural purposes. It is used many elements including laminated arches and roof trusses. Long used for ship and boat construction, the wood is also used to produce a wide variety of products including plywood, flooring, and furniture.

Cones are 3 to 4 inches and have little pointy bracts projecting beyond the scales.

18 **Alternate location** Clarence Ave. and 8th street — two Douglas-firs at northwest corner of Esso station lot

19 NORWAY MAPLE

203 Lake Cres.

In Saskatoon the Norway Maple *Acer platanoides* is rare. Few are able to survive our winters, unless well sheltered as is this one between the houses. It is often confused with our native Sugar Maple *Acer saccharum*, but the two can be distinguished by their sap and by by their leaves. The Norway Maple sap is milky vs. clear for the Sugar Maple. The points on the leaves are distinctively different as well. Canadians were shocked and disappointed when the Bank of Canada came out with new polymer notes in 2013. They were imprinted with the "wrong" maple leaf – the Norway Maple - instead of the Sugar Maple, symbol of all things Canadian!

5 lobes with 5 points and the notches between the lobes are V-shaped

In the 18th century the Norway Maple of northern Europe was introduced to North America and widely planted as a street tree. It is tolerant of many urban conditions such as salt, compacted soil and drought. During the 1950s-60s, it became popular as a street tree due to the large-scale loss of American Elms from Dutch Elm Disease. Unfortunately, in areas where it is hardy the Norway Maple is now considered an invasive species. Due to it being so tolerant of shade and creating its own dense canopy, it often displaces native trees, shrubs and herbaceous understory plants.

1909 Spadina Cres. E.

The Colorado Blue Spruce *Picea pungens var. glauca* is a popular and distinct part of our urban forest. The Latin term pungens means sharp-pointed, in reference to this tree's extremely sharp needles. Native to a relatively small region in the Rockies, extending from Colorado to Wyoming, this spruce has been widely introduced far beyond its native range. It is a columnar or conical evergreen conifer with densely growing horizontal branches.

Seed-propagated Colorado Blue Spruce that is sold in the nursery trade as "blue" may range in color from bluish to greenish. In most respects the blueness is in the eye of the observer. The bluish color is due to the presence of epicuticular waxes on the needles that reflect specific wavelengths of light – the more wax, the more blue. This wax is produced during the needle expansion phase in spring and into early summer but may erode due to wind and exposure to other environmental factors with age, leading to a wide variation in blueness. Stands of young Blue Spruce can be found in the Richard St. Barbe Baker Afforestation Area off Valley Road.

Needles are four sided, have a sharp tip and grow singly around the branch.

21 LODGEPOLE PINE

In the shelter-belt across from 1802 -14th St. E.

The Lodgepole Pine *Pinus contorta var. latifolia* grows very tall and straight. This one is wider because it gets more light and open space than in its normal habitat of closed forest. Native to the Cypress Hills of Saskatchewan, it is common in the Rocky Mountains and is the provincial tree of Alberta. Its Latin name contorta comes from the spiral twist of its needles.

The typical pole-like form was the reason it was used by First Nations peoples to make teepees and lodges; hence the name “lodge” pole. Today the wood is still used for poles, posts and rustic furniture, but also milled into lumber, plywood and paneling.

Lodgepole Pine is one of the first trees to colonize after a fire. Their cones require fire to release the seeds. When suitable growing conditions arise after a fire, the seeds germinate and the forest regenerates. In this way fire is sometimes a vital and natural part of maintaining forest ecosystems.

This tree is very adaptable and can grow in wet boggy sites as well as in drier sandy conditions. Unfortunately the older trees are susceptible to Mountain Pine Beetles, which have devastated many forests throughout western regions of US and Canada.

Yellow-green needles, grow in pairs, twisted in appearance and measure around 1-3 inches long (relatively short compared to other pine species); they are stiff, sharp-pointed, and often found growing in a spiral pattern on the tree branch.

751 Whitewood Court

The Sugar Maple *Acer saccharum* is Canada's national tree, with its iconic leaf stylized on our flag. The Sugar Maple is famous for its brilliant yellow to red fall colours. Unfortunately, it is not cold hardy in our region, and therefore it is rarely planted here. Native to southeastern Canada and northeastern United States, the Sugar Maple is best known for its sweet sap with high sugar content. It is ideal for the production of maple syrup, a skill learned by European settlers from Indigenous peoples. It takes 40 litres of sap to make 1 litre of syrup!

Five lobes and u-shaped notches between lobes.

The Sugar Maple is also prized for furniture, flooring, bowling alleys, bowling pins, basketball courts, baseball bats, musical instruments, archery bows, pool cues and skateboard decks. Unfortunately, human influences, especially pollution from acid rain and road salt, as well as climate change, have contributed to the decline of the Sugar Maple in many regions.

22 **Alternate location** 20 Wentworth Cres. -- corner lot, tree is in backyard visible over side fence

23 BLACK WALNUT

3 Columbia Dr.

Black Walnut seed and even pinnate leaf

The Black Walnut *Juglans nigra* tree is native to eastern North America. Although out of its hardiness range, in recent years it has occasionally been planted here as a street and yard tree. Black Walnut is one of the most coveted of hardwoods. The straight-grained wood is used for fine furniture, veneer, and specialty products like gun stocks. The fruit provides food for both wildlife and humans. While the nut of the Black Walnut is edible, the nuts are not those available commercially in grocery stores. Those come from the English Walnut *Juglans regia*.

Walnut trees produce a natural herbicide, juglone, in the roots and to some extent in the leaves, bark, and wood. Other plants growing within the root zone of the tree may be injured or killed, but not all plants are sensitive to juglone. The hull of the nut of black walnut is used to make a medicine for treating parasitic worms and other infections.

1904 Clarence Ave. — Aden Bowman High School, (north side of building)

The Japanese Lillac *Syringa reticulata* is larger than most of the shrub lilacs and blooms later in spring. It produces large clusters of small, creamy-white, fragrant flowers. It can grow 20-40 feet tall with a canopy spread almost as wide and is hardy in Hardiness Zones 3-7. It is native to eastern Asia and is grown as an ornamental in Europe and North America.

The Ivory Silk Japanese Tree Lilac *Syringa reticulata* "Ivory Silk" is similar but smaller. The natural form is multi stemmed but Ivory Silk is grown as a tree form with one trunk.

Large clusters of creamy-white fragrant flowers.

25 EASTERN WHITE PINE

28 Clark Cres.

Needle are 3-5 inches long, soft and appear in clusters of 5

Eastern White Pine *Pinus strobus* is a large pine native to eastern North America and is found in Newfoundland, the Great Lakes region into eastern Manitoba. It not very common on the prairies. It grows from 50-120 feet tall and has a canopy spread of 30-40 feet. It has long soft needles, an open canopy and a straight trunk. It is pyramidal in shape, fast growing until mature, long lived and prefers acidic soil. The pinecones are long and narrow.

The previous owner of this home brought this tree to Saskatoon from Ontario as a sapling over 40 years ago.

1920 Eastlake Ave.

The Amur Maple *Acer tataricum subsp. "Ginnala"* is a deciduous large shrub or small tree that grows to 20 feet, with brilliant red fall color. It may grow in either a multi-stemmed or single-trunk form. The leaves are opposite, 3-lobed with toothed margins, and are longer than they are wide. The flowers are fragrant, white, and arranged in loose clusters. The seeds

are ¾ - 1 inch long, double-winged samaras typical of maple trees and turn from green to red in fall. The bark is smooth and gray on young branches and grayish brown on older branches. Amur Maple has been found to produce allelopathic chemicals. Allelopathic chemicals are biochemicals produced by plants that can influence the growth, survival, and reproduction of other organisms nearby, either positively or negatively. It can be invasive when planted in an open field, but not as a street tree or landscape tree. It is a good landscape choice because of its small size and lovely fall colour.

Around the corner at 425 Maple Street is a spectacular mature Amur Maple.

27 HONEY LOCUST

937 Emmeline Terrace

Leaves are singly or doubly pinnately compound -- leaflets have a rounded tip, often with a small point.

The Honey Locust *Honey Gleditsia triacanthos L.* is a deciduous tree in the family Fabaceae, native to central North America where it is mostly found in the moist soil of river valleys. Honey locust trees are highly adaptable to different environments. It is a fast-growing tree and can reach a height of 100 feet. It has a life span of 125 years. The doubly compound leaves are alternate and dark green in colour. Large, red thorns are often found on the branches and trunk of wild trees. The thorns typically have 3 points, but may have more, especially those on the trunk. The bark is dark gray and black with deep fissures that form large “plates”of bark on mature trees. The strongly scented flowers appear in late spring. Each cluster is a raceme 3–7 centimeters long with many tiny greenish yellow to greenish-white flowers. The trees are polygamous-dioecious: many trees have only pollen producing flowers or seed producing flowers (strictly dioecious), but some will have both types of flowers in separate clusters, though usually one type will predominate. Long, twisted seed pods form in late summer, and turn from green to dark reddish brown as they mature. The size of these pods is highly variable and give off a strong sweet smell when ripen and fall to the ground in fall.

Alternate location Downey Road — on north boundary of parking lot opposite the entrance to Boffin Gardens

TREE DESTINATIONS OF INTEREST

1 University of Saskatchewan Campus

The University of Saskatchewan campus has been referred to as one of the most beautiful in Canada. Its cohesive architecture, with buildings covered in Tyndall stone and native limestone, along with the high degree of importance in the landscape design and maintenance during the first century of the campus, is what earned the campus this prestigious reputation. Much of the beautiful plantings and unique trees on the campus today must be attributed to the innovation, perseverance and foresight of Dieter Martin, Grounds Supervisor on the campus from 1957 to 1976.

Stately American Elms and Scots Pine are staples on the campus proper. Bur Oak, Silver Maple, Green and Mancana Ash trees, and rare pines are scattered throughout the campus landscape. Ornamental crabapples burst forth with bright pink and white blossoms each spring. Unique specimens of Amur and Ginnala Maples provide rich red colour in fall. Winter is cheered with Balsam Firs near the John Mitchell Building, tall elegant Sub-Alpine Firs between the Agriculture and Ag. Canada buildings, stately Colorado Spruce on the drive to the President's residence, and possibly the city's largest Ponderosa Pine in a grouping of Scots Pine directly west of the Veterinary Medicine building. A small fruit garden south of the Agriculture building highlights haskap, sour cherry and apple releases from the U of S fruit breeding program.

Limited funding for permanent staff and summer students in recent years has put a strain on the health, appearance and maintenance of the campus landscape. Landscapes like the U of S campus are like any living entity: as it ages, continuous maintenance, rejuvenation and expertise are required to maintain its beauty and health so that it will continue to uphold its reputation as one of the most beautiful university campuses in Canada.

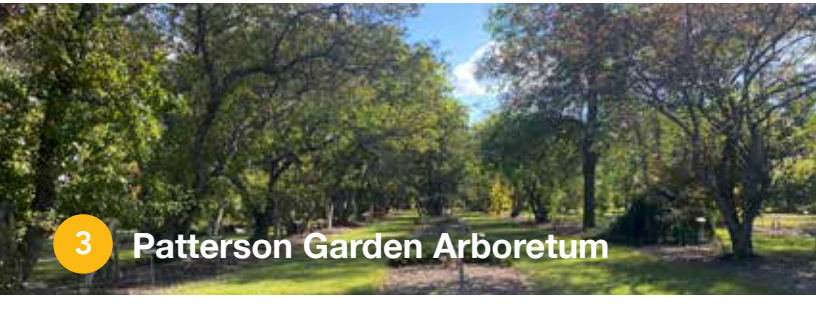
Jackie Bantle, Dept. of Plant Sciences, University of Saskatchewan

2 Woodlawn Cemetery

1502 – 2nd Avenue N.

Established in 1905, Woodlawn Cemetery is a beautiful 94 acre expanse of classic gravestones and memorials, enhanced by some 2000 stately mature American Elm and spruce trees.

Next-of-Kin Memorial Avenue was started in 1923 when elms were planted on either side of the avenue leading into the Cemetery. A memorial to honour Saskatoon soldiers who died in the First World War, it was conceived and undertaken by local women of the IODE (Imperial Order Daughters of the Empire) who declared that “A tree is a living memorial.... a thing of beauty and of inspiration - a living token of the wonder and glory of nature...”. To date over 1200 trees in Woodlawn have been planted and dedicated to veterans of all wars. Similar memorials using American Elms as “Roads to Remembrance” were established across Canada. However, Dutch Elm Disease, urban development, and other factors led to their demise everywhere but in Saskatoon. For this reason Next-of-Kin Memorial Avenue was designated as a National Historic Site in 1993.



3 Patterson Garden Arboretum

South East corner of Preston Ave N. and College Drive

Named in honour of the University of Saskatchewan’s first head of Horticulture, Dr. Cecil F. Patterson, Patterson Arboretum hosts an impressive collection of approximately one thousand trees, shrubs and woody vines, with many rare species and historic cultivars. Established in 1966, the arboretum was created to test the hardiness and adaptability of trees and shrubs to the local conditions. Now almost sixty years old, it stands as a testament to

the forethought and curiosity of its original founders, a theme that continues today as dozens of species are planted each year.

With a backbone of venerable specimen trees and new plantings in between, the arboretum is a pleasant place to stroll and learn. Visitors frequently notice the Chinese catalpa *Catalpa ovata* near the front entrance, and a Kentucky coffee tree *Gymnocladus dioica* in the rows. For seekers of the rare, there are specimens of Rock elm *Ulmus thomasii*, American smoketree *Cotinus obovatus*, Needle fir *Abies holophylla*, and Fernbush *Chamaebatiaria millefolium, to name a few.*

Written by Alan Weninger, Dept. of Plant Sciences, University of Saskatchewan

4 Richard St. Barbe Baker Afforestation Area

241 Township Rd 362, Grasswood

The Richard St. Barbe Baker Afforestation Area is named for the great forester and environmental pioneer. It stands as a testament to the vision of those who recognized the value of trees and forests in preserving our environment. Richard St. Barbe Baker was born in England and attended the University of Saskatchewan, graduating in 1913. Impacted by the land clearing for farming and logging he resolved to study forestry and went on to have a global impact, instrumental in the afforestation movement that is still felt today.

In 1972 a unique “afforestation program aimed at improving the future environment of the City” was initiated in Saskatoon. It led to the planting of 565 acres of City-owned land as “forest in perpetuity” and was officially named as a Park in St. Barbe’s honour in 1979. Today, thanks to Julia Adamson and her dedicated volunteers, walking and cycling trails weave through the mixed woodland featuring dozens of native and naturalized forest species and over 60 species at risk. Richard St. Barbe Baker Afforestation Area is just north of Chappell Marsh Conservation area and acts as a partial greenbelt, providing a semi-natural environment and habitat for wildlife. Across Highway 7 lies George Genereux Urban Regional Park, a space equally rich in heritage and ecological importance.

For more information visit: stbarbebaker.wordpress.com

5 Innovation Place

15 Innovation Blvd.

Innovation Place, established in 1980, is an 80 acre research park adjacent to the northeast part of the campus. Its central area boasts an amazing array of unusual trees and other plants growing in a spectacular setting of water features, sculptures, a Karesansui style dry garden, and picnic areas. A Ginkgo *Ginkgo biloba*, one of the rarest trees in Saskatoon, is nestled into a sheltered spot beside the southeast entrance to The Galleria at 15 Innovation Blvd. A living fossil from China, the species dates back some 270 million years. For information and tours please call the Innovation Place grounds department at 306-933-8401.

6 Forestry Farm Park and Zoo

1903 Forestry Farm Park Drive

In accordance with the Federal Forestry Branch Norman M. Ross developed the Shelter Belt Tree Program at Indian Head Saskatchewan in 1901. It operated until 2013 and distributed over 618 million trees to farmers across the prairies transforming the landscape with the beneficial shelter belts and farmstead plantings we see today.

To keep up with the demand from incoming settlers during the early to mid 1900's the Sutherland Forestry Station was started in 1913 to expand the capacity of tree production for the three prairie provinces. In 52 years of production 147 million trees were distributed from the Sutherland site to help combat drought and soil erosion.

James McLean, Superintendent 1913-1942, oversaw the layout and development of the site, while Les Kerr, Superintendent

1942-1966, continued this vision but also did extensive breeding work with ornamental trees and shrubs. Some of his introductions are still available today from commercial nurseries and three of these can be found in the Heritage Rose Garden at the park, 'Goldenlocks' elder, 'Sutherland Golden' elder, and 'Fuchsia Girl' crabapple.

In 1966 the government consolidated operations to Indian Head. 144 acres of the Sutherland's Nursery's beautifully landscaped site was turned over to the City of Saskatoon for a park, which since 1972 also housed the zoo. Many of the century plus tree plantings still exist.

The Forestry Farm Park and Zoo has been the scene of many family picnics, special events, and provided animal and horticultural education programs. It was designated a National Historic site in 1991 for its important horticultural contribution to the city and provinces.

For a self guided walking tour view walkinthepark.pdf at www.fffh.ca/upcoming-events

In the adjacent Evergreen neighbourhood there is a 70 year old plus stand of Scots Pine, once part of the original Sutherland Nursery Station.

For further reference see: Saskatoon Forestry Farm Park and Zoo - A Photographic History, by Sara Williams

SASKATOON'S LEGACY OF TREES

It is important to recognize those who came before us, both city staff and citizens, who planted and cared for the urban forest that we have today. Saskatoon is indebted to the visionaries A. H. Browne and W.W. Ashley for their foresight and dedication in establishing our urban forest.

Early view of 5th Avenue North with newly planted trees, ca. 1912. (Photograph LH-940, by Ralph Dill)

Alfred H. Browne, a gardener from England, became the first Parks Superintendent in Saskatoon in 1911. He was responsible for over seeing the planting of approximately 30,000 trees in the city. In his early days there was nothing available for planting but native poplar and willow. He soon began importing different species from a Winnipeg nursery, and started a city tree nursery in Saskatoon to grow spruce, pine, and elm. People who knew Browne said that planting trees was a joy, not a job for him. He worked for the city for 44 years.

Wyndham W. Ashley was a business man who championed trees. He became a charter member of the Saskatoon Parks Board in 1912 and served for 45 years. Ashley supervised the planting of 1500 spruce trees in President Murray Park and planted most of the stately American Elms along Saskatchewan Crescent. The City of Saskatoon purchased the nursery in 1966 and developed it into a park and zoo. Ashley personally collected seeds from these trees, along with maple and butternut, and sent them around the province to anyone who wanted them. He encouraged the cultivation of nut trees on the prairies, and he persuaded the Forest Nursery Stations at Indian Head and Sutherland to grow American Elm seedlings for free distribution.

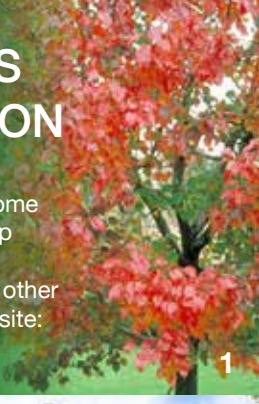
Early view of University Drive with newly planted American Elms, ca. 1912. (Photograph LH-4056)

600 Block University Drive showing new saplings in winter, ca. 1911. (Photograph PH-91-290)

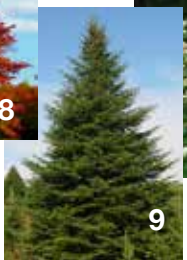
Historical photographs courtesy Saskatoon Public Library, Local History Room

OTHER TREE VARIETIES TO PLANT IN SASKATOON

A number of the trees listed below are less commonly grown in the Saskatoon area and some are more experimental in nature, but would help expand tree biodiversity in the urban forest.
For more information on these trees and many other tree species, please refer to the following web site:
https://www.treesofnorthamerica.net/



1. **Maple Tree "Autumn Blaze"**
2. **Korean Maple**
3. **Tamarack**
4. **Paper Birch**
5. **Black Locust**
6. **Red Maple**
7. **Northern Red Oak**
8. **Pin Oak**
9. **Balsam Fir**
10. **Black Hawthorn**
11. **American Beech**



DUTCH ELM DISEASE (DED)

After reaching southeast Saskatchewan in the early 1990s DED spread through native wild elm stands and rural communities. Saskatoon's first case (a Siberian Elm) occurred in 2015. All cases confirmed since then have been in American Elms, with a large jump in 2024. First identified in Holland in 1921, DED is a fungus spread by tiny elm bark beetles. The fungus blocks the tree's vascular system, **causing rapid decline and death within one to several years.** The beetles are attracted to the bark of freshly pruned, stressed, or dying elm trees, as well as freshly stored elm logs. The beetles dig galleries under the bark in which they lay eggs. If the tree or the cut wood is infected with DED, the emerged adult beetles carry DED spores. When those beetles dig galleries into the bark of healthy elms the spores rub off into the new tree. DED can also spread from infected trees to healthy ones via transmission among roots.

Siberian or Manchurian Elm, *Ulmus pumila*, common in Saskatoon, is a weedy species, smaller, much shorter lived, and more varied in form than the American Elm. It can be infected but not usually killed by DED, and Elm bark beetles can transfer DED from them to American Elms. Therefore, **DED control is essential for BOTH Siberian and American Elm.**

To prevent spread, the early signs of DED e.g. leaves on a branch of an elm tree wilting, curling, turning brown in late June, need to be reported to municipal authorities for sampling the inner bark of that branch and lab analysis to detect the DED fungus. Testing positive for DED, the tree must be completely removed, including the stump to 10cm below grade. All wood must immediately be disposed of at the landfill according to provincial regulations. **Illegal transport of infected elm to use for firewood is the primary factor in the long distance spread of DED.**

DED curled Elm leaves

Efforts to combat the spread of DED include diligent surveillance to find, report, and confirm infections followed by rapid removal of infected trees. It is important to also have public education, and proactive maintenance to keep elms healthy and free of dead wood. In the historic spread of DED across North America most cities failed to promptly act against DED and soon lost all their American Elms. However, a few cities committed resources early to fight the disease and greatly slowed their rate of loss, through ongoing vigilance and rapid action.

Actions that people can take to help prevent the spread of DED into their communities include:

- **Do not transport, sell, store or use elm firewood; it's against the law and one of the main ways that DED can spread.**
- **Dispose of elm wood properly at the site designated by your municipal authority. In Saskatoon it is at the City Landfill.**
- **Prune elm trees to keep them healthy — prune only in winter months outside the annual ban period (April 1 to August 31).**
- **Make sure the tree care professional you hire has the required training. They need to be International Society of Arboriculture (ISA) certified.**
- **Learn the signs and symptoms of DED and report anything that looks suspicious to local authorities.**
  In Saskatoon call Urban Biological Services at 306 975-2890 or fill out their online form at: www.saskatoon.ca/services-residents/housing-property/city-owned-trees/tree-diseases-pests/dutch-elm-disease

  You can also contact the Saskatchewan Government at the Inquiry Centre at 1-800-567-4224 or email centre.inquiry@gov.sk.ca.

For more information on DED:
Saskatchewan Government - www.saskatchewan.ca/business/agriculture-natural-resources-and-industry/forestry/forest-health/dutch-elm-disease

SOS Trees Coalition - www.sostrees.ca/ded-info.html

OTHER THREATS TO URBAN TREES

DEVELOPMENT & URBAN EXPANSION

Boulevard and yard trees suffer greatly from nearby construction that damages branches and compacts the soil over the roots which can be lethal to trees. Often private yard trees are completely removed. If you think a public tree is being impacted, please call City of Saskatoon Urban Forestry at 306-975-2890. **If you are concerned with private trees impacted we recommend you talk to the developer about how removing trees affects your neighbourhood. You can also contact SOS Trees Coalition for support.**

CLIMATE CHANGE

Climate change is the most urgent issue of our time. The predicted changes in our climate are likely to inflict particular stresses on the trees and other plants. We need to keep the trees as healthy as possible so that they can be resistant to drought and attack by emerging pests and new diseases. **Water trees during drought.**

CARELESS LAWN MAINTENANCE

Severe damage to the bark of trees is inflicted by the use of weed whippers (line trimmers) around tree trunks. **Remove grass around the tree base and apply mulch.**

NATIVE TREES, SHRUBS AND PLANTS

Trees and Shrubs

Native trees and shrubs have a place within the urban forest's public spaces and even in yards. They are resilient and well adapted to the local environment. Their presence ensures that insects, birds and other wildlife have a natural habitat within the city. Some insect species rely only on native plants for reproduction and food sources.

Once established these trees and shrubs require little maintenance. Much less water is required when they are planted in beds and allowed to maintain the leaf litter as mulch, mimicking wild spaces.

These plants are best planted in groupings as companion plantings. The trembling aspen needs space as it will continue to send up new seedlings. The Bur Oak, Manitoba Maple, Green Ash, Larch, Birch and Spruce all add value to a native landscape planting. Some of these species are not native to the Saskatoon area but they are all native to Saskatchewan and are hardy prairie trees.

Along with the trees, planting some native shrubs is also beneficial. Shrubs offer fruit and shelter for wildlife. Saskatoon berry, dogwood, buffaloberry, snowberry, wild rose, and highbush cranberry are just some of the many native shrubs that could be used in the landscape along with native trees.

There is no rule about mixing native and non native plants. In fact sometimes this mix might be what is needed depending on soil conditions, moisture and our changing climatic conditions. Doing research about what grows best in a particular site is the key to a successful planting.

Tree Understories

Creating an understory of plants beneath your trees has many benefits. Making stories of greenery is a great way to maximize the use of your space, especially if you don't have a lot of it. Many plants grow well in partial or full shade areas. Native plants are an ideal choice for your understory, as they not only provide beautiful arrays of yellows, purples, and whites around the base of trees, but they are also adapted to endure the intense summer heat and frigid winter cold of Saskatoon's climate. In addition, they are robust food and habitat sources for many of the region's pollinators, thus helping to maintain a healthy, biodiverse community.

Not all native plants do well in shaded areas. For more of a low level or ground cover understory, some good options include early blue violet, wild columbine, and wild strawberry. Harebell and anemone are short but are more vertical plants for a somewhat higher understory. Bergamot, giant hyssop, smooth blue aster, and stiff goldenrod are taller, stalkier plants that will add a taller understory. There are many other plants you could use, depending on the shade cast by your tree and its understory's exposure to the sun.

Refer to the following resources for more information about native plants, their benefits, and their requirements:

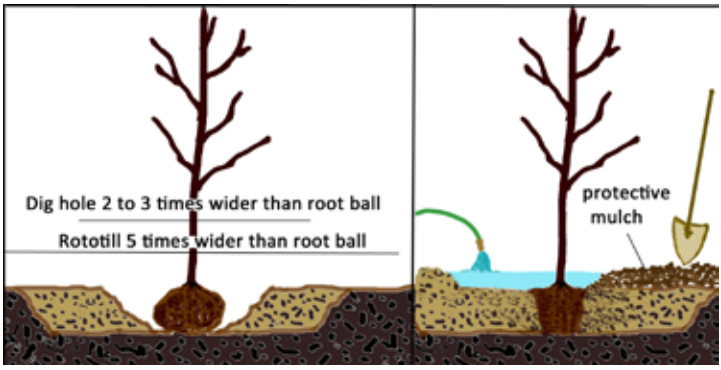
Wild about Saskatoon https://wildaboutsaskatoon.org/ >Pollinator Paradise >Plant List Recommendations >Starting a Native Plant Garden

Native Plant Society of Saskatchewan https://www.npss.sk.ca/info-resources >Grow Me Instead Wallet Card

PROPER TREE PLANTING

Most plants are sold in either containers or as B & B (balled and burlapped), meaning their roots are contained in a 'ball' and covered with burlap. Larger trees and shrubs are often available only as 'B & B'.

STEP 1. Dig a hole 2 or 3 times the size of the root ball or container, but no deeper than the root ball height. Scatter some bone meal into the hole and fill with water. For trees and shrubs, use Myke's growth supplement or another brand of mycorrhizae fungi sprinkled lightly in the hole or added to the water, as per instructions on the package. These three things ensure that essential nutrients and moisture are easily accessible to the plant at the root level immediately after planting. (Mycorrhizae fungi form a network of filaments that associate with plant roots and draw nutrients from the soil that the root system would not be able to access efficiently otherwise. This fungus-plant alliance stimulates plant growth and accelerates root development.) Rarely will you need to modify the existing soil, as the plant roots will grow well beyond the planting hole within the first several years. For trees planted in a predominately clay soil, acidic soil, or alkaline soil, the backfill soil may need to be modified to give the tree or shrub a better chance of becoming established within the first several years. The existing soil type might also determine your selection of tree or shrub as some are more tolerant or suitable to your soil type.



Drawings show the correct planting of a tree or shrub

STEP 2. As the water soaks into the ground, tip the plant container slightly and gently remove the plant. You may have to tap around the container to loosen the root ball from the container sides. In stubborn cases, you may have to cut the container to remove the plant. If the plant is B & B, untie and remove all burlap and twine or wire.

STEP 3. Place the entire root ball in the hole with the top of the root ball at grade level and water.

STEP 4. Once the water has soaked into the hole backfill with the existing soil from the excavation. You may need to backfill in several stages and tamp the soil firmly to remove any air pockets.

STEP 5. Create a 'soil saucer' effect around the plant so that water will pool around the trunk or stem. Fill saucer with water and allow it to soak in thoroughly. Mulching is desirable to keep the soil from drying out too quickly. But keep the mulch a few inches from the trunk to prevent fungus and rot developing at the trunk. Keep soil moist (not soggy) for two weeks and water regularly for the first growing season. Water is the most critical factor for tree establishment, health, and growth. Do not allow the newly planted tree or shrub to dry out. A newly planted tree requires a minimum of 10 litres (2.5 gal) of water every 3 or 4 days for the first month and then once every 7 to 10 days for the next 3 years. Watering frequency should be increased during hot dry weather.

STEP 6. In general, it is not advisable to stake a tree as it prevents the tree from flexing to environmental forces and developing internal strength. However, if you wish to stake a tree to prevent it from blowing down, ensure that the restraints are not so tight as to girdle the tree, and remove them within a year.

NOTE: When planting next to a structure, ensure you allow sufficient space for growth. For example, if your plant will be two feet tall, position it two feet from a fence or wall. This will allow for mature spread and avoid the squished or confined look! In positioning a tree, think of the diameter of the canopy when the tree will be mature.

For a hands-on experience and instructions on tree planting, you may wish to volunteer for the annual tree planting projects with the Meewasin Valley Authority or the SOS Trees Coalition.