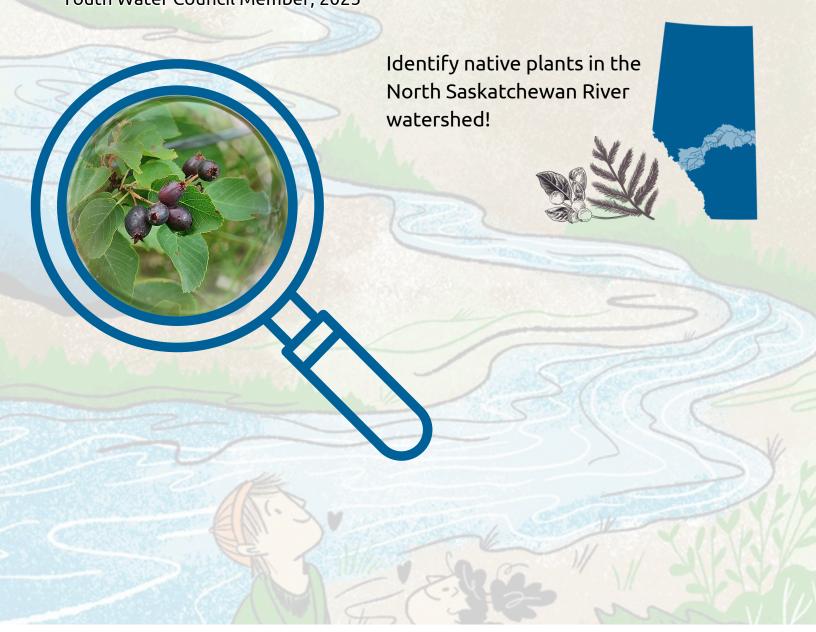
Watershed Keepers: Native Plant Guide

Researched and written by Abigail Morrish Youth Water Council Member, 2025







Access the corresponding Activity Guide & student worksheets:



WATERSHED KEEPERS NATIVE PLANT GUIDE

This is an identification guide for native plants in the North Saskatchewan River Watershed. The plants featured in this guide are common wildflowers, trees, and shrubs in this region.



Native species are plants and animals that have lived within our watershed since time immemorial. Native plants are important parts of the ecosystem. Because these plants evolved in this region, many other plant and animal species rely on them to survive and thrive.

For example, some native bee species live almost exclusively on the pollen from single flower species! Plus, some native plant species are **codependent**, meaning they rely on one another to survive. Codependency teaches us why planting diverse gardens is so important. Plants are an essential part of our ecosystems!

Invasive species are plants or animals that have been introduced to ecosystems from other countries or regions that harm our environment. These invasive species are fierce competitors, often driving out native species and all the other plants and animals that rely on them.



When a single species comes to dominate an environment, this is called a monoculture and is detrimental to ecosystems because only having one species present often reduces nutrient recycling – the process by which the soil stays fertile and can continue to support life.

NOTE: Many of the species found in backyards and school fields are **introduced species**, like short grasses (often a mix of Kentucky blue grass, creeping red fescue, and rye grass) and dandelions. While they are not native species, these plants are also not invasive, since they do not cause harm to the environment. Introduced species, like dandelion, can even support the environment

LET'S GET STARTED!

Plants included in this guide are listed in alphabetical order. You can use the included field worksheet and handy leaf learning tool to get ready for your plant survey! Reference the glossary (last page) for any unfamiliar words.

Plants identified with a '*' are species that are included in the guide.



It is important to know which plants are native and which plants are invasive because plants affect the health of our lands and us as humans in ways we can not always see.

Although no invasive plants are featured in this booklet there are other resources that go into detail about them such as the <u>Weed-Guide-2022-web.pdf</u> by the Alberta Invasive Species Council that can help students identify the plants that bully the plants featured here.



Invasive Plants of Alberta Weed Guide 2022

NATURE WALK: STUDENT FIELD NOTEBOOK
Use this space to add sketches to any observations:

LEARNING TO LOOK FOR SIGNS OF WILDLIFE

During nature walks, even if you don't see animals, chances are there are signs that wildlife are nearby. Here are a few things you might want to watch for or add to your field notes.

ANIMAL TRACKS
Check size, symmetry,
and distance between
steps. Sketch their shape.

BIRD NESTS OR FEATHERS Record features like shape and size. For nests, check what it is made of and its location (high up, on the ground). OTHER SIGNS
Everything from eggshells,
antlers, chewed twigs, or
even scat (droppings) can
indicate an animal is nearby.

LEARN YOUR LEAVES

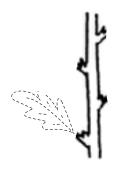
One of the best ways to identify plants is by the shape and size of their leaves.

Learn what common plant definitions are by completing the drawings below

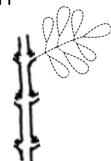
Where are the leaves attached to the stem?

Add leaves to each stem to learn the difference between **Alternate, Opposite, and Basal Rosette** leaf arrangements.

Alternate



Opposite



Basal Rosette



Are there many leaves on separate stems, or all together?

Copy the leaves to to learn the difference between simple and complex (compound) leaves.



Simple leaves



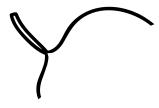
Compound leaves
Sometimes called complex leaves



What do the edges of the leaf look like?

Finish the drawings to learn the difference between and smooth and toothed leaf edge.

Smooth



Toothed



ALPINE HEDYSARUM

Hedysarum alpinum L.

Also called: Bear root or Alpine Sweetvetch

How to say it: Al - PINE Hed-ee-SAR-um

WHAT DOES IT LOOK LIKE?

Plants can be tricky to identify! If you find a plant that has the same characteristics like leaves, flowers, and size as what is listed here, you can guess that the plant you found is Alpine hedysarum.



GENERAL

- 50cm 80cm tall
- Reddish brown stem

FLOWERS

- Pink or reddish purple
- Droop downward
- Slightly bell or teardrop shaped
- Branch off the stem individually

LEAVES

- Compound leaves (many leaflets on one main stem)
- 9-20+ leaflets on each stem
- Leaflets are long and skinny, ranging from a lanceolate to oblong in shape





WHERE TO FIND IT?

- This plant prefers moist ground, like near creeks or ponds
- Often grows along slopes and wooded areas
- Can be found in disturbed areas



Bumblebee & other pollinators love their flowers!



Nutritious roots provide food source for grizzly bears and other animals

COOL FACTS!

This plant has a positive symbiotic relationship with fungi and bacteria around their roots. This means that the plant will trade resources with these other organisms so that both the plant and the others benefit together.

Alpine hedysarum are legumes, which means they are related to beans and peas.

However, unlike the peas and beans you are familiar with, the seeds of this plant are poisonous! Alpine hedysarum's roots are highly nutritious. Diverse Indigenous peoples across Canada use this plant for food and medicine. It is said that the roots taste like young carrots.



Do not pick, eat, or use wild plants unless you have an expert with you!

BALSAM POPLAR

Populus balsamifera

How to say it: BALL - sum Pop - ler

WHAT DOES IT LOOK LIKE?

Plants can be tricky to identify! If you find a plant that has the same characteristics like leaves, flowers, and size as what is listed here, you can guess that the plant you found is Balsam Poplar.



GENERAL

- · Medium-sized tree
- Grows to 25 meters tall (the same length as a swimming pool)
- Brownish-grey bark. In older trees, bark is very thick and bumpy

LEAVES

- Leaves and a deep green, with pale undersides spotted with sticky red-orange spots. In the fall, the leaves turn yellow.
- Leaves have an ovate shape, with a bluntly toothed edge.





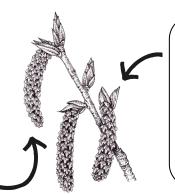
WHERE TO FIND IT?

- This plant prefers moist ground, like in valleys and near ponds
- Often planted as a windbreak around fields
- Since these are fast growing trees with wide root networks, they are often planted in disturbed areas that are experiencing erosion issues

COOL FACTS!

Balsam poplar flowers don't look like flowers at all! Their flowers grow in a form called a "catkin".

During the spring, long fluffy white catkins grow on poplar branches. Just before the summer, catkins fall off the tree, releasing pollen that causes some people to have seasonal allergies.



One of the best ways to identify Balsam poplar by their leaf buds.

When leaves are growing, their buds are sticky, orange, and strongly scented.

COMMON CATTAIL

Typha latifolia

WHAT DOES IT LOOK LIKE?

Plants can be tricky to identify! If you find a plant that has the same characteristics like leaves, flowers, and size as what is listed here, you can guess that the plant you found is a Common cattail.

GENERAL

- Have tall, sturdy stems that are 1-3 metres
- On the top of the stem is an oval-shaped brown seed cluster. This seed cluster is best described as looking like a hotdog on a stick!

LEAVES

- Long, narrow, and flat leaves that resemble giant blades of grass.
- Leaves are smooth all over.
- During the spring and summer, leaves are a bright green. Once seeds have been released, the plant will turn yellow-brown.





WHERE TO FIND IT?

- This plant grows in wet, marshy areas.
- Commonly found on the edges of lakes, in wetlands, and in ditches.
- · Cattails thrive in most wet, nutrientrich environments. This means they can be found in non-natural areas including storm water ponds and dugouts.



COOL FACTS!

Indigenous peoples have long used all parts of cattail plants. Various plant parts can be used for food, weaving, medicines, and other household uses, including pillow stuffing.

Cattail stems are tender and taste like cucumbers. While the brown seed clusters look like hotdogs, they should not be eaten. Cattail seed bundles evolved to rapidly expand when touched, meaning you will get a mouthful of fluff if you try biting in!

Do not pick, eat, or use wild plants unless you have an expert with you!

Cattails are used by a huge variety of animals. Many birds, including red winged blackbirds (like the one pictured here), ducks, sparrows rely on cattails for food, shelter, and nest building. Mammals like muskrats and many insects similarly rely on cattails.

EVENING PRIMROSE

Oenothera biennis

WHAT DOES IT LOOK LIKE?

Plants can be tricky to identify! If you find a plant that has the same characteristics like leaves, flowers, and size as what is listed here, you can guess that the plant you found is an Evening primrose.

GENERAL

- Can reach 1 1.5 metres tall
- Evening primrose have long, leafy stems. Flowers only bloom at the top of the plant.
- Evening primrose is a biennial plant, which means that plants only live for two years.
 - Its first year, check for a low, leafy plant.
 - In the second year, expect to see its bright yellow flowers!

LEAVES

- · Leaves connect directly to the stem
- The leaves at the base of the plant grow in a basal rosette, 10-30 cm long and 2-5 cm wide at their thickest. Leaves grow alternately up the stem, becoming smaller near the top of the plant.
- In mature plants, leaves are a lanceolate shape. In younger plants, leaves have a rounded, rather than pointed shape.
- Leaf margins (edges) can be slightly toothed.

WHERE TO FIND IT?

- This plant grows in sunny, open areas.
- Evening primrose can commonly be found in fields, clearings and dry disturbed areas.







FLOWERS

- The flower consists of four bright yellow, heart-shaped petals. Each petal is longer than the **stamen** in the centre of the flower.
- Flowers close up during the day, and reopen during the evening.

COOL FACTS!

The evening primrose supports specialist bee species in the watershed.

This means that the bees have a favourite kind of flower to collect pollen from. One in particular is the "primrose sweat bee" (pictured here) along with 10 other bee species that survive off the evening primrose.



Evening primrose are sometimes considered a weed, since they are quick to grow in disturbed soils, like farmers fields and ditches. However, as a native species, there is no evidence that they outcompete or dominate other plant species.

FIREWEED

Chamaenerion angustifolium

WHAT DOES IT LOOK LIKE?

Plants can be tricky to identify! If you find a plant that has the same characteristics like leaves, flowers, and size as what is listed here, you can guess that the plant you found is Fireweed.





GENERAL

- Can grow to be 1.3-3 m tall.
- Stems have a slight pink tinge.
- Fireweed blooms from July to August.

FLOWERS

- Flowers are bright pink to purple and 2-3 cm across.
- Each flower is individually attached to the stem.
- There may be 8 to 80 flowers per plant. Each flower has 4 petals, 4 sepals, and 8 stamen

LEAVES

- Leaves are *lanceolate* in shape and grow in an *alternative* pattern along the stem.
- Leaves vary a lot in size, from 1.5-20 cm long and 0.5-35 cm wide.







WHERE TO FIND IT?

- Fireweed as its name would suggest commonly grows in areas that have recently been affected by wildfires.
- Fireweed grows in various environments, including open meadows, along streams, roadsides, and along forest edges

FUN FACT

These flowers will be everywhere in the years following a fire, but 15-20 years later there will be much less because they have played their part and there is not enough nutrients to sustain them anymore. This is called succession as new species take the place of old ones as an area heals.



HOW IT HELPS THE ECOSYSTEM

Fireweed is one of the first plants to inhabit an area after a wildfire and plays a key role in restarting nutrient recycling. After a fire most of the nutrients from the burned trees gets returned to the soil and fireweed will take up those nutrients and make them more usable for other species.

FIREWEED

Chamaenerion angustifolium

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LODGEPOLE PINE

Pinus contorta

WHAT DOES IT LOOK LIKE?

Plants can be tricky to identify! If you find a plant that has the same characteristics like leaves, flowers, and size as what is listed here, you can guess that the plant you found is a Lodgepole pine.

GENERAL

- Lodgepole pine are coniferous trees, meaning they have needles that stay on the tree year-round.
- These trees grow extremely tall, up to 50m in height (the same length as an Olympic-sized swimming pool!)
- The bark of the trunk is plated and reddish brown or grey in colour.

NEEDLES AND CONES

- Lodgepole pine's often have all their needles clumped near the top of the tree.
- The needles are 2-8 cm long and bound in twos.
 The pair of needles twist around each other
- Lodgepole pines have two types of cones:
 - Male (pollen) cones are small, only about 1cm long, yellow or red in colour, and oval-shaped.
 - The <u>female seed cones</u> are hard and scaled, grey or reddish-brown, and teardrop shaped. Female cones are 3-6 cm long.



WHERE TO FIND IT?

- Lodgepole pine is one of the most common trees in Alberta and will grow in many environments, ranging from the Rocky Mountains to parts of the Aspen parkland.
- These trees can typically be found in areas that experienced a wildfire in the past.







FUN FACT

Lodgepole pine cones will only open on their own and release their seeds when they experience extreme heat. They will open in a wildfire and this is why Lodgepole pines will be the first trees to grow after a fire.



HOW IT HELPS THE ECOSYSTEM

Lodgepole pines provide shelter for other species. Birds create nests in the branches. Insects nest under the bark. Finally, forests of this trees are perfect habitat for many large mammals.

NORTHERN WHEATGRASS

Elymus lanceolatus

Also called: Thickspike wheatgrass

WHAT DOES IT LOOK LIKE?

Plants, especially grasses, can be tricky to identify! If you find a plant that has the same characteristics as what is described here, you can guess that the plant you found is Northern wheatgrass.



GENERAL

- Grows in stalks 22 cm to 1.3 m tall.
- The blades of Northern wheatgrass are 2-6 mm wide and can be smooth or be slightly hairy.
- Each individual blade is 5-25 cm long

SEEDS

- Each individual seed is topped with an awn. Each seed is usually 7-11 mm long.
- Seeds are clustered at the top of the stem when fully grown. These clusters are called <u>spikelets</u> and there is usually only one per stem.
- Spikelets vary in shape, but are usually 2-9 cm long.

WHERE TO FIND IT?

- This grass species commonly grows in fields.
- Commonly grown on sandy or gravelly soil.
- Northern wheatgrass grows as a turf grass, meaning it is grown in large clumps or patches.





FUN FACT

While it has "wheat" in its name and it looks similar to a stalk of wheat, this grass cannot be used for baking!



Different types of grasses often look very similar to one another. To learn more about native grasses, check out the Government of Canada's Field Guide to Selected Native Forages for the Canadian Prairie Grasslands.

HOW IT HELPS THE ECOSYSTEM

This grass species can be used for reclaiming areas because it uses special roots called rhizomes to clone itself and spread. This allows Northern Wheatgrass to thrive in both natural ecosystems and **disturbed areas**.



PURPLE PRAIRIE CLOVER

Dalea purpurea

WHAT DOES IT LOOK LIKE?

Plants can be tricky to identify! If you find a plant that has the same characteristics like leaves, flowers, and size as what is listed here, you can guess that the plant you found is Purple prairie clover.

GENERAL

- Grows 20-50cm tall.
- Often grow in clumps.
- Purple prairie clover stems are red, growing tall and fairly straight. Flower heads grow at the top of each stem.

FLOWERS

- The main flower head, called a "spike," is oval-shaped and green-white in colour. Spikes are 1-6 cm long.
- Small pink-purple flowers bloom on each flower spike. Flowers are tiny, with 30-40 growing on each spike.
- Flowers bloom from the bottom of the flower head up to the top.
- Purple prairie clovers are in bloom from July to August.

LEAVES

- Purple prairie clover leaves are compound. They attach to the stem in an alternate pattern.
- Each leaflet is **linear** in shape.
- Little hairs grow along leaves' edges.





WHERE TO FIND IT?

- Grows in full sun.
- Thrives in flat areas such as fields.
- Most common in prairie and parkland regions.





FUN FACT

You have probably seen white and red clover before - they are what you might imagine alongside leprechauns! However both these species are introduced, while purple prairie clover is native.



native introduced



HOW IT HELPS THE ECOSYSTEM

Purple prairie clover is part of the pea family, which has a unique relationship with soil bacteria. These bacteria live around the plant's roots and convert nitrogen from the air into a form that plants can use. This process adds valuable nutrients to the soil, helping plants—especially young ones—grow faster and stronger.

SASKATOON BERRY

Amelanchier alnifolia

Also called: Serviceberry, Juneberry

WHAT DOES IT LOOK LIKE?

Plants can be tricky to identify! If you find a plant that has the same characteristics like leaves and size as what is listed here, you can guess that the shrub you found is a Saskatoon berry bush.

GENERAL

- Grows as a shrub or small tree, 1-5 m tall.
- Often grow in patches.
- Branches are smooth and grey to red-brown.

FLOWERS

- The flowers that bloom in late spring and are replaced by berries in the summer
- Saskatoon flowers grow in clusters of 5-15.
 Each flower is white with five petals. Each petal is 0.5-1 cm long.

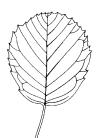
FRUIT

- Saskatoon berries are ripe in July and August.
 When ready to be picked, berries are indigo in colour.
- Berries are 0.5-1 cm wide and grow in clusters.









LEAVES

- Leaves can be oval to rounded square in shape with toothed edges.
- Leaves grow alternately along the shrub's branches. Usually, leaves will grow at the ends of the branches to catch the most sunlight possible.
- Each leaf is 2-5 cm long and 2.5-5 cm wide.

WHERE TO FIND IT?

- Prefers moist environments in open woods, underbrush, and valleys where it can get a lot of sun.
- Widely grown in gardens and yards.
 Depending on where you live in the watershed, you may even live near a Saskatoon berry farm!

FUN FACT

The berries are edible and make a delicious treat! In addition to being tasty, Saskatoon berries are high nutrients like Vitamin C, magnesium, and iron. Want to give them a try? Farmers markets and U-Pick farms sell berries during the summer!



Do not pick, eat, or use wild plants unless you have an expert with you!



HOW IT HELPS THE ECOSYSTEM

Saskatoons provide food for a large number of species. Birds are easily able to pick the delicious berries with their beaks. Herbivores will also eat the berries when available. Finally, bears will eat saskatoons to bulk up for winter. Because these other creatures love Saskatoons just as much as humans, be safe if you go out to pick them yourself!

SMOOTH BLUE ASTER

Symphyotrichum laeve (formerly Aster laevis)

Also called: Smooth aster, Smooth-leaved aster, Glaucous aster

WHAT DOES IT LOOK LIKE?

Plants can be tricky to identify! If you find a plant that has the same characteristics like leaves and size as what is listed here, you can guess that the shrub you found is a Smooth fleabane.

GENERAL

- Smooth blue aster has hairless stems
- Can reach up to 100cm tall.

FLOWERS

- Smooth blue aster produces daisylike flowers, each measuring about 2.5 cm across.
- Flowers have 15-30 thin, pale purple petals that surround a yellow or red centre.
- Flowers grow in small clusters at the top of plant stems.
- Flowers are in bloom during the late summer and early fall.

LEAVES

- Smooth fleabane grows up the stem *alternately*.
- Near the top of the plant, leaves are egg-shaped to *linear*. The leaves will wrap around the stem at their base.
- Closer to the ground, leaves are lightly toothed. They are longer, with a more *lanceolate* shape and an elongated base.







WHERE TO FIND IT?

- These flowers commonly grow in dry fields, prairies, and open woods. They grow in full sun.
- While Smooth blue aster can grow in *disturbed areas*, they do best in healthy natural environments.

FUN FACT

This plant uses wind dispersion to spread its seeds. Much like dandelion flowers, Smooth blue asters will get small globes of seeds with umbrellalike structures that allow them to be carried away by the wind to plant far away from the parent plant.



HOW IT HELPS THE ECOSYSTEM

Smooth blue aster is a great food source for all types of pollinators. The flowers will attract butterflies and bees. The larvae for two different types of butterfly will also grow up under the protection of the aster.

In Alberta, sweat bees, bumblebees, and leaf cutter bees are particularly attracted to Smooth blue asters.

SMOOTH FLEABANE

Erigeron glabellus

Also called: Streamside fleabane, Common fleabane

WHAT DOES IT LOOK LIKE?

Plants can be tricky to identify! If you find a plant that has the same characteristics like leaves and size as what is listed here, you can guess that the shrub you found is a Smooth fleabane.

GENERAL

- Range in height from 10-60 cm tall.
- Smooth fleabane plants often grow in clumps, rather than as individual stems.

FLOWERS

- Smooth fleabane produces daisy-like flowers, each measuring 2.5-5 cm across.
- Flowers have many long thin petals that range from a light purple-pink to white surrounding a bright yellow centre.
- 1-3 flowers grow at the top of plant stems.
- Smooth Fleabane is in bloom from June-August.



LEAVES

- There are two types of leaves on this plant: one type can be found in the basal rosette and another type that grows up the stem alternately.
 - The leaves of the **basal rosette** are 5-15 cm long and usually *oblong* shaped.
 - The leaves that are growing up the stem get smaller and more pointed as they ascend, becoming more *linear* and lanceolate in shape.

WHERE TO FIND IT?

- Grows in flat areas, such as fields or on the banks of streams.
- Commonly found in partially sunny or partly shaded areas, including open forests or prairies.



The word "bane" means something that is an annoyance or can cause trouble. Knowing that, can you guess what insect is said to be repelled by Smooth <u>flea</u>bane?

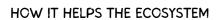
Folklore says that if Fleabane is burned or kept around, it will keep fleas away. While Smooth fleabane can have this repellent effect, there is evidence that its relative, Philadelphia fleabane, does the job better.



Do not pick, eat, or use wild plants unless you have an expert with you!







This is a very pollinator friendly plant! Smooth fleabane is in bloom longer than most other flowers and attracts many types of pollinators.

TIP! Smooth fleabane is a native plant that looks similar to Oxeve daisies, an invasive that is considered a "noxious weed" in Alberta.

SNOWBERRY

Symphoricarpos albus

Also called: Waxberry

WHAT DOES IT LOOK LIKE?

Plants can be tricky to identify! If you find a plant that has the same characteristics like leaves and size as what is listed here, you can guess that the shrub you found is a Snowberry.

GENERAL

- Usually grows 1-1.8m tall.
- Snowberry shrubs have woody red-brown stems.
- Like the name suggests, this plant has berries that are small and white.

FLOWERS

- Snowberry bushes are in bloom from May to July.
- Flowers are pinkish-white and bell shaped. Each bloom is 0.5cm long.
- They in pairs, often forming clusters of on the ends of branches.

LEAVES

- Leaves grow up the stem in an *opposite* pattern.
- Leaves vary between an *elliptical* shape and an *ovate* shape.
- They measure 2.5cm long and 1.5 cm long.

WHERE TO FIND IT?

- Grows in flat areas in open fields or on the edges of forests and roads.
- Plants can grow suckers, causing them to spread. This means that they can often be found in patches and thickets.









FUN FACT

The twigs of this shrub are hollow. In the past, some Indigenous peoples used these hollow stems for pipestems. As well, Snowberries contain saponin, which is a natural soapy substance that can be used as shampoo and for washing hands.



Do not pick, eat, or use wild plants unless you have an expert with you!

HOW IT HELPS THE ECOSYSTEM



Snowberries are a good food source for birds. The berries last into winter so birds that do not migrate can continue to eat them over the cold season when most food is gone. Plus, when in bloom, Snowberry flowers attract butterflies, hummingbirds and other pollinators.

The berries of this shrub are poisonous to humans, dogs, and most other large mammals.

TALL GOLDENROD

Solidago altissima

Also called: Late goldenrod, Canada goldenrod

WHAT DOES IT LOOK LIKE?

Plants can be tricky to identify! If you find a plant that has the same characteristics like leaves and size as what is listed here, you can guess that the plant you found is a Tall goldenrod.

GENERAL

- Can grow 0.5-2m tall. They are among the tallest of all Goldenrod species!
- Goldenrod stems grow straight and are slightly hairy.

FLOWERS

- · Goldenrod flowers are bright yellow.
- The flowers cluster in groups of 100-1200.
- Each individual flower is about 0.6 cm across with 8-15 tiny petals per flower.
- This plant blooms from August to October.



LEAVES

- · Leaves grow up the stem in an alternate pattern.
- Leaves are pointed both at the connection to the stem and the tip. Their shapes vary between a lanceolate shape and an elliptical shape.
- Leaf edges are slightly toothed.

WHERE TO FIND IT?

- Grows in flat areas in open fields or on the edges of forests and roads.
- This wildflower grows in sunny areas.





FUN FACT

When planted alongside Asters, Goldenrod will see an increase in pollinator activity because of the beautiful contrast in colour between the yellow

of Goldenrod and the purple of most Asters, like Smooth Fleabane.



HOW IT HELPS THE ECOSYSTEM

All species of goldenrod have a fibrous root system which helps prevent erosion and stabilize the soil. Because of this and the fact that goldenrods can survive in many soil types, this plant is beneficial in



The deep reaching roots of goldenrod plants not only increases soil stability but also increases the amount of nutrients and water found in the upper layers of the soil which other plants benefit from.



TREMBLING ASPEN

Populus tremuloides

Also called: Quaking Aspen

WHAT DOES IT LOOK LIKE?

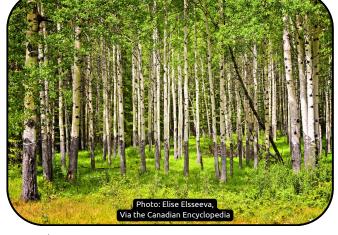
Plants can be tricky to identify! If you find a plant that has the same characteristics like leaves and size as what is listed here, you can guess that the tree you found is a Trembling aspen.

GENERAL

- Grows to 25 meters tall (the same length as a swimming pool). Tree trunks are often quite skinny, but range from 30-100cm in diameter.
- The bark is off-white with raised black scars. Towards the base of the tree, it will be more grey and bumpy. In older trees, bark is very thick.

LEAVES

- Leaves are a bright green colour, have an ovate shape, and are toothed, with 25-40 teeth on each side.
- Most of the tree's leaves are clumped near the top of the trunk.
- In the fall, the leaves turn golden yellow.
- The name "Trembling aspen" comes from how the leaves move and shiver in even the lightest breezes.







Like Balsam poplar, Trembling aspen also have catkins.

WHERE TO FIND IT?

- One of the most common trees in Alberta, the Trembling aspen will grow in many places, including mountain sides, the edges of streams, and the edges of grassy fields.
- Especially common in the Parkland region of Alberta, so much so that this region is also known as the Aspen Parkland region.



FUN FACT

The largest organism in the world is a forest of a massive colony of Trembling aspen clones connected through by their roots in Utah, USA.
Genetically, every tree in that forest is the same! The forest is named Pando.

HOW IT HELPS THE ECOSYSTEM

This tree is extremely adaptable and is able to bounce back after most environmental disruptions, including forest fires or logging. Trembling Aspen can grow from seeds, spread both through wind distribution, and by cloning itself from its roots. This mean it can spread quickly and help with reclamation of lands and reforestation.

Because of their dense leaf canopy, some research has found that aspen help slow down forest fires and reduce burn severity!

WHITE SPRUCE

Pincea glauca

Also called: Canada Spruce, Skunk Spruce

WHAT DOES IT LOOK LIKE?

Plants can be tricky to identify! If you find a plant that has the same characteristics like needles, cones, and size as what is listed here, you can guess that the tree you found is White spruce.

GENERAL

- A tree that grows up to 30m tall. Its trunk grows up to 1 meter in diameter (the distance around the trunk)
- The bark is brownish grey with shallow cracks that show more red tinged bark underneath.
- The tree forms a cone shape, with a narrow top and a wider bottom.



NEEDLES AND CONES

- The needles are 12-19mm long. They are rigid and sharp.
- Needles are blue-green and sometimes waxy with a white powder coating.
- White spruce needles grow directly on the branch.
- The seed cones are usually 3-6 cm long, light brown and oval shaped.
 The scales of the seed cone are rounded, not sharp where they are visible.



WHERE TO FIND IT?

White spruce are the most common species in the Boreal forest, but can

be found around the province. White spruce can be found mixed in with other tree species like Trembling aspen, Balsam poplar, and more.



FUN FACT

White spruce grow in every forest region in Canada, aside from on the Pacific Coast. They can be found as far north as the Arctic tree line. This is why they are sometimes called "Canada spruce."

HOW IT HELPS THE ECOSYSTEM

This tree provides food and shelter to many species. Small and large mammals, including deer, rabbits, porcupines, and birds are known to eat white spruce bark, seeds, cones, branches, and buds for food.

OTHER USES

White spruce are often used in windbreaks! Along the edges of farmer's fields, their dense branches block prairie winds, which help protect crops, reduce soil erosion, and help preserve soil moisture.

WILD ROSE

Rosa acicularis

Also called: Prickly Wild Rose, Prickly Rose

WHAT DOES IT LOOK LIKE?

Plants can be tricky to identify! If you find a plant that has the same characteristics like leaves, flowers, and size as what is listed here, you can guess that the plant you found is Wild rose.

GENERAL

- A shrub that grows 0.5m-1.5m tall.
- Stems are reddish-brown and covered in rigid, light-coloured thorns.

FLOWERS

- Wild rose flowers have 5 heart-shaped petals.
 Petals range from light pink to a bright magenta.
- Each flower is 5-7 cm across.

LEAVES

- Leaves grow in an alternate pattern up the stem.
- Leaves are compound, made up of 3-7 leaflets. Each individual leaflet is 3-4 cm long, elliptical in shape, and toothed.

FRUIT

- In the late summer and early fall, Wild rose grow rose hips. They are redorange and 1 cm-2 cm long
- Rose hips are sour, and extremely high in Vitamin C



Do not pick, eat, or use wild plants unless you have an expert with you!







WHERE TO FIND IT?

Wild rose can be found across the watershed in the underbrush of forests. Also check for Wild rose growing in prairies and along roadsides and other **disturbed areas**.



FUN FACT!

You probably recognize the Wild rose's iconic flower. It is Alberta's provincial flower, and it is used widely as a symbol of the province!



HOW IT HELPS THE ECOSYSTEM

Wild rose provides food to birds over the winter because rose hips stay on their branches until they wilt, typically in the spring. The branches also offer habitat to birds for nesting.

Underground, Wild rose bushes have dense root systems that stabilize the soil and prevent erosion.



YARROW

Achillea millefolium

WHAT DOES IT LOOK LIKE?

Plants can be tricky to identify! If you find a plant that has the same characteristics like leaves, flowers, and size as what is listed here, you can guess that the plant you found is Yarrow.

GENERAL

- The stems of the Yarrow plant grow 30-70 cm tall.
- Yarrow can grow tall and skinny, or as dense bushes.

FLOWERS

- Grow in dense clusters of 10-30 white flowers per head. Flower clusters are slightly rounded on top.
- Flowers grow at the top of the stem.

LEAVES

- Leaves grow in an alternate pattern up the stem. At the bottom of the stem, leaves grow in a basal rosette.
- Leaves are compound. Each individual leaflet is actually compounded twice, which gives the leaves a fluffy, feathery look.





WHERE TO FIND IT?

Yarrow is found in many natural regions including grasslands, mountains, Boreal forest, and in *disturbed areas*.

TIP! Yarrow can sometimes be found in grassy areas on the edges of fields or walking paths. While hard to see, be sure to check for their distinct leaves hidden among blades of grass



HOW IT HELPS THE ECOSYSTEM

The deep roots of the yarrow plant have the ability to dig up *nutrients*, such as potassium, phosphorus, and copper. These resources can then be used by other plants nearby to grow big and strong.

FUN FACT!

First Nations and Metis people from across the prairies have medicinal uses for all parts of the Yarrow plant. For example, its numbing effects may help with pain from wasp stings, blisters, and headaches. While not toxic to eat, Yarrow can cause an upset stomach.



Do not pick, eat, or use wild plants unless you have an expert with you!



GLOSSARY

Alternate (leaf growth)	Leaves grow so they are not side by side. After one leaf there is a space then the next grows on the opposite side of the stem.
Awn	Small hairs at the tips of some grass species seeds. For example, the long tips on a stalk of wheat.
Basal Rosette	Leaves that grow in a circular pattern around the base of the stem.
Catkin	The flowers of many wind pollinated deciduous trees, like Trembling Aspen or Balsam Poplar. They are a drooping cluster of flowers that can kind of look like a fluffy animal tail.
Compound (leaf growth)	A leaf growth pattern in which multiple leaflets are attached to the same stem and these leaflets as a whole comprise the leaf. Sometimes called "complex" leaves.
Disturbed Areas	Areas on the land that have been impacted by human activity. A good example of this is roadsides.
Ecology	The study of ecosystems and their interconnected components.
Elliptical (leaf shape)	Oval shaped leaves with a slight point at the tip.
Invasive	Not originally from a place and causing it harm.
Lanceolate (leaf shape)	A slightly triangularly shaped leaf. Gaining its name from the comparison to a lance weapon from medieval Europe.
Linear (leaf shape)	Leaves that are very thin and long. They are basically a line, both sides of the leaf are nearly parallel.
Native	Originally from a place and belonging there.
Nutrients	In this context, nutrients refers to the minerals found in soil that plants need to function.
Oblong	Oval shaped leaves
Opposite (leaf growth)	Leaves grow so that both leaves on either side of the stem start at the same place.
Ovate (leaf shape)	The leaves are broad and rounded at the base but come to a point at the tip. They look similar to a spade in a card deck.
Ray flower	Typical flower growth of daisies and species that are similar.
Sepal	A modified leaf that makes up the outermost part of a flower. They tend to be green
Species	A group of living organisms that have similar and exchangeable genetics.
Stamen	The male part of a flower that holds the pollen of the plant.
Toothed (leaf edge)	The leaves have serrations like the bumps on a steak knife along the side instead of being

smooth.