

The background of the entire page is a photograph of a forest. In the foreground, several tree trunks are visible, with varying bark textures and colors ranging from light tan to dark brown. Sunlight filters through the trees in the background, creating a dappled light effect. The title text is overlaid on this image.

# People and Plants

Traditional and Contemporary  
Relationships with  
British Columbia's Native Plants

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**Culturally modified tree (aka CMT)** describes the modification of a tree by indigenous people as part of their tradition. Here, cedar bark is harvested in a way that does not harm the tree.

## About this guide

The purpose of this guide is to highlight the many ways we interact with BC's native plants and the multitude of roles they play in our lives, past and present.

Humans have always relied on plants for our survival; as a source of materials, food, medicines, and spiritual connection. In order to maintain these relationships, we must conserve the ecosystems that foster plant health and diversity, and harvest respectfully using sustainable practices.

Do not harvest in parks and protected areas. Take only photos in these shared and sensitive environments! In other areas, respect local First Nations territories and follow the advice and practices of an experienced guide.

**This guide is not intended to provide identification for plant consumption or harvest. Always consult an expert!**

If you are interested in harvesting native plants, we recommend growing them in your garden. See the section on Naturescaping to learn more about the many benefits.

### A note on mushrooms

Three species of fungi have been included with the plants in this collection. However, they are not plants. Unlike plants, fungi do not photosynthesize, gaining nutrients from other sources such as soil and wood. Instead of seeds, they reproduce through spores. Because they grow, are harvested, and are used much like plants, they are included here.

## Exploring and Experiencing

We hope this guide will help you discover the native plants growing in your region – in backyards, neighbourhoods, and nearby parks and natural areas. Stop and observe: you may be surprised by what you will discover!

### Some questions to consider:

- How would you explore a plant for potential uses?
- What uses can you think of for the plants around you?
- How can a plant be harvested in a sustainable way?  
How can you tell if a harvest is unsustainable?
- What can you learn from the plants around you?
- How do plants and their uses change with the seasons?
- How have the uses of a particular plant changed over time?
- How might plants be used in the future?

### Naturescaping at home

Try growing plants that are native to your region for yourself and for wildlife! This is a great way to explore plant uses and harvest sustainably from the correct species. Gardening with native plants to create habitats and support native wildlife is known as *Naturescaping*. Naturescapes take less effort to maintain than other types of gardens, they require less watering, and offer up-close connections with nature all year-round. Learn more about the benefits of naturescaping and source seeds and plants from your local native plant nursery.





## Western Redcedar

*Thuja plicata*

**Where found:** Common along the coast of BC. Also grows in wetter areas of central BC. Habitat is wet to moist soils in shady forests, river terraces and slopes in the lowland and montane zones.

**Description:** This large tree grows to about 60 m tall. Branches spread and droop slightly, upturning at the ends. Bark is grey to reddish brown, fraying vertically in aromatic fibrous strips. Leaves are yellow-green and scale-like. Cones are small, brown, and egg-shaped, opening with age.

**Uses:** Redcedar has been called ‘the cornerstone of Northwest coast [Indigenous] culture’ because of its multitude of traditional uses including: canoes, totem poles and other carvings, bentwood boxes, houses, ropes, baskets, hats, clothing, and fuel.

Western redcedar wood contains chemical substances such as *thujaplicins* that are natural fungicides and can prevent rot for up to a century after a tree is felled. Because of this property, Western redcedar is often used for outdoor construction such as posts, decking, shingles, and siding. These chemicals also repel insects such as moths, keeping items stored in cedar boxes protected from infestation.



## Yellow-Cedar

*Chamaecyparis nootkatensis*

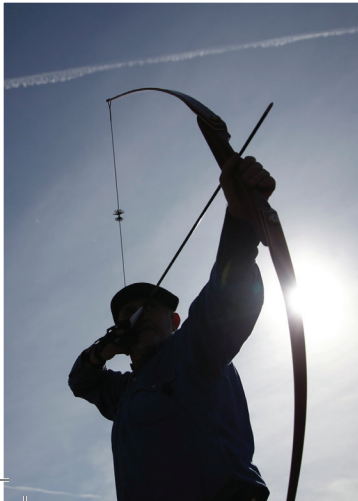
**Where found:** Throughout BC's coast from northern Vancouver Island to Alaska. Grows west of the Coast range. Often found in wet, boggy sites but it can also grow in rocky areas at higher elevations.

**Description:** A large tree up to 50 m tall. Branches spread out and droop. Bark is greyish-brown and frays vertically in strips exposing yellow inner bark. Leaves are blueish-green and scale-like. Cones are round and blueish when young, yellowing with age to brown.

**Uses:** There are traditional uses for almost every part of the Yellow-cedar. Roots are dried and braided to make hats and baskets. Bark is dyed and processed into thread for clothing. The bark is also used for ropes, baskets, and fishing nets. The wood is used for canoes, paddles, fish hooks, spears, and fishing floats.

Like Western redcedar, Yellow-cedar is very rot resistant. Because of its longevity and durability, it is used for shingles, posts, bridges, decking, marine pilings, small boat hulls, oars and paddles, water tanks, and exterior doors. It is sometimes used in specialty construction projects such as temples and shrines.





## Pacific Yew

*Taxus brevifolia*

**Where found:** Southern BC to Alaska, mostly near the coastal shoreline, but with isolated populations in southeast BC. Grows in moist soil, often with Douglas-fir and Western hemlock in old-growth forests.

**Description:** A small to medium-sized tree, 10-15 m tall. Branches tend to droop. Trunk is often twisted, with scaly reddish bark. Beneath the outer bark the wood can range from brown to magenta. Needles are dark green and flat. The seed cones are partially surrounded by a fleshy, red, berry-like structure called an aril.

**Uses:** The wood of the Pacific yew is durable and traditionally used to make bows and tool handles. The wood of other yew species is also a favoured material for bow-making in Europe.

A compound called paclitaxel was originally discovered in the bark of yew trees. It has been used to create the chemotherapy drug Taxol, used in breast, ovarian, pancreatic, and lung cancer treatments.

Initial clinical trials were delayed by the large amount of bark needed to produce the active ingredient and the slow growth of Pacific yew trees, however when a synthetic form of the compound was developed, treatment was able to become widespread.



## Bigleaf Maple

*Acer macrophyllum*

**Where found:** Grows at low and mid elevations in the southwest corner of BC, including on Vancouver Island. Often found growing in clusters from the same base in moist soil.

**Description:** It is the largest species of maple in Canada, growing up to 35 m tall. Broad branches are often covered with mosses and ferns. Bark is grey-brown, becoming grooved with age. Large green leaves measure up to 30 cm across and are 5-lobed. The leaves turn yellow in autumn. Flowers are small, hanging in yellowish-green clusters. Winged seeds (samaras) are paired in a V-shape, and fall from the tree like whirling helicopter propellers.

**Uses:** Traditional uses for maple wood include canoe paddles, utensils, tools, and spindle whorls.

An attractive, rich, wood, maple is also used to create furniture, flooring, and musical instruments. Maple syrup can be derived from Bigleaf maple but the process takes longer than with the Sugar maple of eastern North America. This is due to the higher water content that needs to be boiled off from Bigleaf maple sap.





## Paper Birch

*Betula papyrifera*

**Where found:** Across most of BC's interior and scattered along the coast. Paper birch is intolerant of shade and thrives on open slopes, wetland and floodplain margins, and in clearings resulting from disturbances such as wildfire and insect infestations.

**Description:** A small to medium tree growing up to 30 m tall. The trunk is slender with an oval or pyramid-shaped crown of branches. Bark is papery, peeling in horizontal strips. Coppery when young, it becomes white with horizontal brown lines as the tree matures. Leaves are oval with sharp-pointed tips and toothed edges. Flowers are sausage-shaped catkins 2-4 cm long.

**Uses:** The bark is flexible and waterproof. Sheets of it are used by Interior First Nations groups to make traditional canoes and baskets.

The sap can be made into syrup, much like maple syrup, and is used to make soft drinks and alcoholic beverages.

Birch wood is used to make furniture, cabinets, flooring, and veneers. Because it has little odor or taste, it is also used to make biodegradable food items such as popsicle sticks, toothpicks, and cutlery.



## Salal

*Gaultheria shallon*

**Where found:** Common throughout coastal BC, Salal is found as an understory shrub in coniferous forests. It tolerates wet to dry soil at low to medium elevations.

**Description:** Salal can creep along the ground or stand up to 5 m tall. Leaves are leathery, tough ovals with slightly pointed ends. Flowers are pink or white bells that hang in rows at the end of the twigs. Salal's berry-like fruits are hairy and purplish-black at maturity.

**Uses:** Salal 'berries' have long been an important fruit for Indigenous Northwest Coast communities. They are eaten both fresh and dried into cakes. These cakes were stored for winter and also traded. When used to line a pit-cook, Salal leaves protect and add flavour to the food. Because the leaves keep their shape and colour for a long time, stems of Salal have become popular greenery for flower arrangements. Florist buyers spend more than \$25 million per year on Salal harvested in BC and ship the stems worldwide.





## Pine Mushroom

*Tricholoma murrillianum*

**Where found:** Species range extends through BC from the Rocky Mountains to the coast. In mountainous areas, it is common under mixed conifers, while on the coast it favours sandy pine forests.

The cultivation of pine mushrooms has been mostly unsuccessful. This is due in part to the complex relationship it has with the roots of certain tree species.

**Description:** The Pine mushroom is a type of fungus. Whitish in colour, they gain pinkish-brown or yellow-brown stains or scales on the cap and stem as they age. A veil covers the cap and gills when young, later forming a prominent ring on the stalk. The odour has been compared to spicy, dirty socks. As there are poisonous look-alike species, do not pick without expert advice.

**Uses:** Pine mushrooms are among the fungi traditionally eaten by the Nlaka'pamux (Thompson), and Lil'wat (Lillooet) First Nations of BC. The Pine mushroom (known in Japan as matsutake) has been a part of Japanese culture for centuries. Today, these mushrooms symbolize good fortune and happiness, and are considered a delicacy for their flavour.

Economically, the pine mushroom is the most important species of wild mushroom in BC. Harvest ranges up to 400,000 kg per year, much of which is exported to Japan.



## Pacific Golden Chanterelle

*Cantharellus formosus*

**Where found:** Throughout western BC, single or gregarious in coastal conifer forests where it forms an association with the roots of Douglas-fir and Western hemlock trees. Due in part to these mycorrhizal relationships, cultivation of this fungus has not been successful.

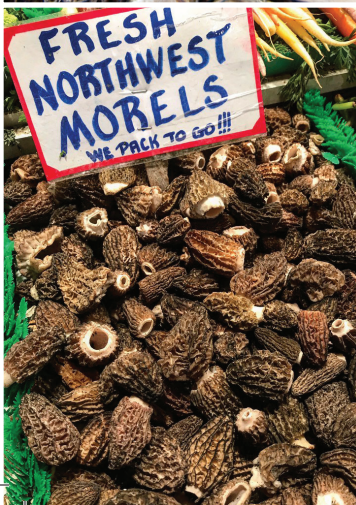
**Description:** The Pacific golden chanterelle is a type of fungus. The fruiting body is yellow to orange in colour. The gill ridges are usually paler than the cap. The stem is coloured similarly to the cap, and is either equal-width or tapering downwards. The spore print is a yellowish white color. As there are poisonous look-alike species, do not pick without expert advice.

**Uses:** Chanterelles are traditionally eaten by the Nlaka'pamux (Thompson) First Nations of BC.

A flavourful ingredient popular with high-end restaurants, the Pacific golden chanterelle is widely harvested and commercially valuable.

Chanterelles are globally renowned as one of the best edible forest mushrooms, and their international commercial value likely exceeds a billion dollars annually.





## Black Morel

*Morchella elata*

**Where found:** Throughout the province Black morels are mostly found in coniferous forests, disturbed ground and recently burned areas.

**Description:** The Black morel is a type of fungus. The fruiting bodies, which are produced in springtime, have dark, hollow conical or egg-shaped caps, and are deeply pitted like an irregular honeycomb. Stalks are smooth, white, and hollow. As there are poisonous look-alike species, do not pick without expert advice.

**Uses:** Morels are not known to be used traditionally in BC. However, they have long been eaten in other parts of the world, particularly Europe. They are becoming increasingly popular in North America as well. Every spring, there are morel festivals in numerous mid-west American cities.

Morels are prized by gourmet cooks, particularly in French cuisine. As morels are known to contain thermolabile toxins, they must always be cooked before eating. Due to difficulties in cultivation, commercial harvesting of wild morels has become a multimillion-dollar industry in BC with pickers flocking to areas recently burned by wildfires. Morels can sell for as much as \$75 per 100 grams (dry).



## Devil's Club

*Oplopanax horridus*

**Where found:** Common through all but north-eastern BC in wet to moist stream banks and forests, in the lowland to subalpine zones. It is most abundant in the old-growth conifer forests of the Pacific Northwest.

**Description:** Devil's club grows 1-3 m tall and has thick stems covered in hard, brittle, yellow spines. It has large, broad, maple-leaf shaped leaves with spines on the underside. It has small white flowers that mature into bright red, shiny berries.

**Uses:** Devil's club is one of the most important spiritual and medicinal plants to Indigenous peoples who live within its range. Various parts of the plant are used to treat arthritis, rheumatism, ulcers, diabetes and other diseases. Charcoal from the stalks is used to make ceremonial and protective face paint.

In BC, Devil's club is harvested for the herbal medicine industry. It is especially popular in Asia. The closely related Korean Devil's club is the most valuable herbal plant crop produced in Korea. It is being studied for use in combating tuberculosis and leukemia.





## Pacific Willow

*Salix lucida ssp. lasiandra*

**Where found:** Throughout BC on riverbanks, floodplains, shores, thickets and clearings in the lowland, steppe and montane zones.

**Description:** The Pacific willow is a tall, slender shrub or tree, growing to 12 m tall. Bark is yellow-brown, becoming fissured with age. Leaves are green and lance-shaped, tapering to a long point. Buds of the leaves are yellow and shaped like a duck's bill. Catkins are thick and yellow with male and female flowers on separate trees. Male catkins grow to 7 cm long, female catkins to 12 cm long.

**Uses:** Pacific willow is traditionally used for smoking meat, starting fires, and for weaving. The bark is chewed as a way to heal sore throats. The Lil'wat (Lillooet) First Nation traditionally makes fire drills from the tree as well as twine and rope out of the bark.

The leaves and bark of willow species contain salicin, which is metabolized into salicylic acid in the human body and relieves pain. Salicin was synthetically altered to create acetylsalicylic acid, and named Aspirin. This gave rise to the medication class of nonsteroidal anti-inflammatory drugs (NSAIDs).



## Stinging Nettle

*Urtica dioica*

**Where found:** Both native (ssp. *gracilis*) and European (ssp. *dioica*) subspecies are common throughout BC. Stinging nettles are found in meadows and as an understory plant in wetter environments such as along stream banks. Abundant in disturbed habitats with moist, rich soil.

**Description:** Lance-shaped leaves grow from a central stalk, 1-2m tall. The leaves have strongly serrated edges. The stems and undersides of leaves are covered in hairs that irritate the skin if touched. Flowers are small and dense, in drooping clusters.

**Uses:** Stinging nettle has long been used throughout its range for many purposes: as an early spring nutrient-rich food, as a medicine for rheumatism and renal ailments, and as a fiber for making fishing nets, ropes, and woven cloth.

Stinging nettle is also wild-harvested and cultivated for use in the cosmetics industry. Nettle oil extract is used in commercial skin and hair-care products.





## Black Huckleberry

*Vaccinium membranaceum*

**Where found:** Common throughout BC except Haida Gwaii, it is a common understory shrub in dry to moist coniferous forests. Also found in open areas, from middle to high elevations.

**Description:** Black huckleberry is a shrub growing up to 1.5 m in height. Leaves are egg-shaped, very thin, and have serrated edges. Flowers are creamy pink and urn-shaped. Berries are shiny and purplish or reddish-black.

**Uses:** Black huckleberries have traditionally been a food source throughout their range.

Harvesting huckleberries for consumption is now a multi-million dollar commercial activity in BC. Berries are typically frozen or used to make jams and syrups.

In some areas such as the Kootenays, commercial picking has been restricted to protect huckleberries as a critical food supply for grizzly bears. In late summer huckleberries can account for 75% of a bear's diet as it fattens up before hibernation. A grizzly can eat 14-27 kg (30-60 lbs) of berries per day.



## Red Alder

*Alnus rubra*

**Where found:** Found all along the coast of BC, Red alder is the most plentiful hardwood in the region. It does not tolerate shade and occupies open sites quickly after a disturbance. They are short-lived trees that fix atmospheric nitrogen into the soil, supporting a lush undergrowth. Found in soils rich with nutrients, including floodplains and stream banks.

**Description:** Red alder is a medium-sized tree that grows up to 24 m. The bark is thin and grey to whitish on mature trees. The inner bark turns deep reddish-orange when exposed to air. The oval-shaped leaves have pointed tips and coarsely toothed edges that tend to curl under. Alders produce both male and female flowers. Pollen-producing male flowers are long and drooping catkins. Female flowers become small, egg-shaped, woody cones.

**Uses:** The bark is a traditional dye for basket materials, wood, wool, feathers, and human hair and skin. Depending on the techniques used, colours range from black to brown to orange-red.

As a hardwood, Red alder wood has no resin and is good for smoking meat and seafood. Its smoke is delicate, subtle and slightly sweet. Red alder is also used for furniture, flooring, cabinets, veneer, and carvings.







## Fireweed

*Epilobium angustifolium*

**Where found:** Common throughout BC, Fireweed is found in open forests, thickets, meadows, roadsides, burns, and clearings in all vegetation zones.

**Description:** Fireweed grows as an unbranched stalk up to 3 m tall. Leaves are lance-shaped. Flowers are rose to purple in colour and are clustered at the top of the stem. Seeds are attached to white fluff and are dispersed on the wind.

**Uses:** Traditional uses of Fireweed include using the seed fluff to stuff mattresses and combining it with animal wool to weave into blankets and clothing. The stalk fibers can be twined into cord and the very young shoots and leaves can be cooked and eaten.

Because the flowers of Fireweed bloom in high concentrations and produce generous amounts of nectar, Fireweed locations are sought out by beekeepers. Hives are placed by the flowers and the honey produced by bees feeding on Fireweed is frequently described as “the champagne of honeys” for its clarity and light, fruity taste.



## Red Algae Seaweeds

Genus *Porphyra*

**Where found:** Common throughout the coastal waters of BC. Grows in cold, shallow seawater of the intertidal zone, typically between the upper intertidal and the splash zones.

**Description:** Red algae seaweeds are marine algae. Like terrestrial plants, *Porphyra* species gain energy from the sun through photosynthesis. However, they are quite different in structure. For example, seaweeds have no roots and reproduce by spores or replication.

Seaweeds of the genus *Porphyra* typically consist of translucent sheet-like blades with ruffled edges. They are green to red in colour, often reddening as they mature.

**Uses:** Red algae seaweeds are high in nutrients (notably iodine and B12) and have long been used as foods throughout their range.

The global seaweed harvest has an estimated value of over US\$6.4 billion a year. Seaweed is used in everything from sushi to ice cream to cosmetics to animal feed. The seaweed-farming industry in BC is small but expanding. It is seen as a sustainable form of aquaculture with growing markets. It may also have a beneficial role in mitigating climate change as seaweed sequesters carbon from the atmosphere and deposits it in the deep ocean.



## Ostrich Fern

*Matteuccia struthiopteris*

**Where found:** Found throughout BC except on Vancouver Island and Haida Gwaii. Ostrich ferns favour moist to wet, silty banks of rivers and streams in the lowland and montane zones.

**Description:** In early spring the fronds begin to emerge as tightly coiled “fiddleheads”. As they mature, the long, upright, green fronds unfurl into feathery, ostrich-like plumes that can be nearly 2 m tall.

**Uses:** The young emerging fiddleheads are a traditional early spring food of First Nations within their range, and are typically baked, boiled, or eaten with grease.

As their season is short (they become inedible as they mature) fiddleheads remain a profitable wild-harvested culinary delicacy. Harvesting fiddleheads is a significant commercial activity in the Northern and Southern Interior of BC.





## Sitka Spruce

*Picea sitchensis*

**Where found:** Sitka spruce grows in a narrow band along BC's coast. It is rarely more than 80 km inland and is most common along the coastal fog belt and on river and stream floodplains. The species grows in pure stands on the Pacific Coast as it tolerates salt spray better than many plants.

**Description:** Sitka spruce is a large tree that grows to a height of 70 m. The bark is very thin, brown or purplish-grey, and breaks up into small scales. Sitka spruce needles are bluish-green, stiff and sharp. Seed cones are reddish brown. Their seed scales are thin, wavy, and irregularly toothed. Pollen cones are red.

**Uses:** Sitka spruce is traditionally used in winter dance ceremonies and for medicinal purposes. The roots are used to create water-tight hats, baskets, and ropes.

Because it is stronger than the same weight component made of steel, Sitka spruce has been used to build airplane framework. The original flying plane built by the Wright Brothers and British Second World War Mosquito bombers were made with Sitka spruce.

The wood also has excellent acoustic properties and is used to make sounding boards in pianos and other musical instruments such as violins and guitars.



## Lodgepole Pine

*Pinus contorta* var. *latifolia*

**Where found:** Lodgepole pine is a highly adaptable species that grows throughout most of BC's Interior, from mid-elevation to subalpine sites. It thrives in all sorts of environments, from wet bogs to dry, sandy soils. It is one of the first trees to come back after a wildfire.

**Description:** A medium-sized conifer that can reach 30 m in height. A tall, slender, straight tree, it has spreading branches and a thin orangey-brown to grey bark with fine scales. The needles are dark green and grow in pairs. Seed cones are egg-shaped and the seed scales have sharp prickles at their tips.

**Uses:** The pitch is used as the base of many traditional medicines. It can be chewed to relieve sore throats, or boiled and mixed with animal fat to use as a poultice for rheumatic pain or to soothe soreness in muscles and joints.

Lodgepole pine lumber is used as a structural framing material in all types of residential, commercial, industrial and agricultural construction. It is used for telephone poles, fence posts and corral rails because of its small diameter and lack of taper. It is also used for mine timbers, railway ties, and fuel.







## Sea Asparagus

*Sarcocornia pacifica*

**Where found:** Common along the BC coast in wet salt marshes and along beaches in the lowland zone.

**Description:** Sea asparagus is not related to farmed asparagus. It is a low-lying fleshy perennial growing in bushy mats. The stems are jointed and knobby and grow from long rhizomes. Typically green, the stems turn purplish near the flowering tips. Flowers are tiny and sunken into pits in the stems.

**Uses:** Sea asparagus is a nutrient-rich vegetable with a crunchy texture and briny taste. It is eaten raw, pickled or steamed, often with seafood. It is wild-harvested in springtime in BC and often sold by seafood suppliers.

In Europe, related plants are known as “glasswort” because they were burned to create an alkali ash needed for glass making.



## Douglas-fir

*Pseudotsuga menziesii*

**Where found:** Common in southern BC, becoming less common through central BC. Grows on moist to dry slopes, river terraces and flats in the lowland and montane zones. On drier sites it will grow deeper taproots.

**Description:** Douglas-firs are large evergreen trees growing up to 100 m tall. They are the largest trees in BC and can live to over 1,000 years. Bark is grey-brown to reddish-brown, becoming thick and deeply grooved with age. The thickness of the bark protects it from wildfire. Needles are green and flat with a pointed tip. The undersides are a paler green. Cones are brown when mature and have distinctive three-pointed bracts that protrude from under each scale.

**Uses:** Traditionally, Douglas-fir has long been used as a fuel for heating and cooking. The pitch can be used to caulk canoes to make them water-tight.

The seasonal wild-harvest of Douglas-fir and other conifer boughs for Christmas decorations and wreaths is a multi-million dollar commercial activity in BC. Douglas-firs are also commonly grown for use as Christmas trees.

Douglas-fir timber is commonly used in construction for its strength, hardness and durability. The US Navy uses ships made of Douglas-fir for mine-sweeping.

## Terminology

**Catkin:** A slim, cylindrical flower cluster, with tiny or no petals, arranged closely along a central stem that is often drooping.

**Cellulose:** The substance in plant cells that makes plants rigid and aids in keeping plants from collapsing.

**Conifer:** A tree that bears cones and has needle-like or scale-like leaves that are typically evergreen. Sometimes referred to as softwood.

**Deciduous:** A tree that loses its leaves at the end of its growing season. Sometimes referred to as hardwood.

**Mycorrhizal:** The symbiotic association of the mycelium (root-like structure) of a fungus with the roots of a plant.

**Native plant:** A plant occurring naturally in a particular region, ecosystem, or habitat without human introduction.

**Needles:** The small, waxy leaves of conifers. As they are more waterproof and wind tight than the larger leaves found on deciduous trees, they remain on the tree year-round.

**Photosynthesis:** The process by which plants and algae transform light energy into chemical energy. During photosynthesis, light energy is captured and used to convert water, carbon dioxide, and minerals into oxygen and energy-rich organic compounds.

**Pitch (aka Resin):** Only produced by trees that belong to the Pinaceae family, such as pine, fir, spruce, and cedar. It is produced in the bark and has antibacterial properties which prevent a damaged tree from infection.

**Rhizome:** A modified (sometimes subterranean) plant stem that sends out roots and shoots from its nodes.

**Sap:** A translucent, thin, watery, slightly amber coloured substance that develops within certain tree cells. The sap transports nutrients throughout the tree, including hormones, sugar, and minerals.

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