

# BEACH PEAS

Latin: *Lathyrus japonicus*  
Common name: Beach Pea

## ROOTS & FLOWERS

### COOKING

Both peas and pea pods can be eaten raw or cooked.  
**Beach Pea**  
cook time:  
8-10 minutes  
**Garden Pea**  
cook time:  
1-2 minutes

- Salads
- Smoothies
- Sautés
- Soups
- Garnishes

Beach peas prefer a much cooler climate and are a rather hardy plant that can withstand the winter months in *North America*, as well as in *Asia* and *Europe*. Often found growing along foredunes, gravel storm beaches, and even along the lake shorelines of the *Great Lakes*, they typically grow beside other varieties of reeds in marshy areas, in outlets near the ocean.

### STRUCTURE & ROOT SYSTEM

Beach Pea is an herbaceous perennial plant that flowers each year and dies back down to its roots staying dormant throughout the winter months. The stems of the plant form into what are known as rhizomes.

### LEAVES

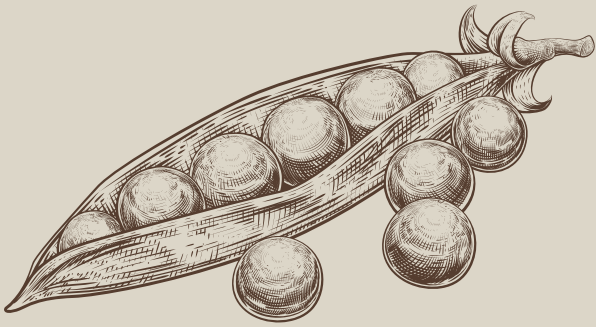
Beach peas can grow up to 2 feet long and have stalks that turn from red to green. Attached along the stalks are its leaves which can vary in color from light green to greenish blue. The leaves are also compound meaning they are leaflets that are in pairs of 3 to 6, alternating along the leafstalk. The leaflets are ovate and 1 to 2 inches long and a half inch wide, appearing in a winged manner. The leaflets have smooth edges that narrow at the end with a paler green underneath. At the end of the leaves are branched tendrils, providing support for the plant, since it has a shallow root system.

### FLOWERS

Beach pea flowers can be found along their leafstalks in clusters from 6 to 12. The upper petals of the flower appear pinkish-purple and with age turn to purplish-blue. The lower petals appear from white to light violet. The bloom lasts from May and runs throughout the summer into August.

The fruit of the plant (also known as pods) begin to appear in late June and begin to ripen in cooler months. The pods form in clusters that range anywhere from a count of 3 to 8. The immature pods are a bright green and can have a red color to them. As they mature, they brown and the peas inside dry out. The pod shape can

vary from flat to round, with anywhere from 4 to 10 peas in a pod. The peapods are about  $\frac{1}{4}$  inch wide and up to 2 inches long. You can easily remove the peas from the pods by tearing off the tip of the pod and pulling downward.



## HARVESTING

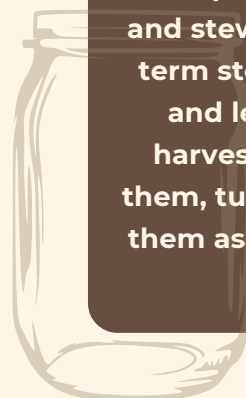
There are many edible parts to the beach pea, so harvesting can start as soon as you see the bright green shoots. It's best to harvest shoots off the main stems. The plant will produce new shoots throughout the season as well, and -when picked mindfully- can encourage the plant to generate more; it is recommended to only pick shoots every 3 to 4 weeks from the same plant.

As the season goes on, the plant continues to send out new shoots and flowers. The first shoots often have a purple hue when they first start to emerge from the sand and the leaves eventually turn green as the weather starts to warm. The older leaves start to develop a blue hue and are no longer edible as they become rather tough. The stems of the plant will still have the purple-reddish hue, this is how you can tell the difference in the edibility of the shoots. The younger shoots appear bright green, these are the ones you want to harvest.

When harvesting pods it's best to cut off the stem with the pods to protect the plant's root system.

## STORAGE

When storing beach peas, you can dry them naturally or dehydrate them and incorporate them into different soups and stews that can be canned for long-term storage. Grind up the dried peas and leaves into a jar. You can also harvest the more mature seeds, dry them, turn them into a powder, and use them as a substitute for coffee or flour.





# ELDERBERRY

Latin: *Sambucus nigra*

Common name: American Black Elderberry, Elderflower, Elderberry

In Penobscot: séskipe

## MAJOR USES:

- Juice
- Jam
- Pies
- Sauce
- Wines
- Immune support
- Cold and flu relief
- Acne, age spot, & wrinkle treatment
- Rheumatism and fever treatment
- Burn relief
- Indigenous instruments
- Natural dyes
- Basket weaving
- Teas

American Black Elderberry is a flowering shrub that can be found in moist yet well drained soil that can be very dry, as well as edges of banks and areas with disturbed soils. It can grow in full sun or partial shade. Elderberries species can be found around the world in parts of *Europe, Asia, Africa*, as well as *North and South America*.



## STRUCTURE & ROOT SYSTEM

Black Elderberry is a suckering plant: it sends out new shoots each season but has a significant number of branches that die back every year. This plant's ability to send out new shoots from the main root is quite impressive. If conditions are right, elderberry growth can sustain allowing it to become a small tree as opposed to a shrub.



## LEAVES

Leaves can reach up to a foot long and are pinnately compound, meaning the leaf is composed of 5 to 11 leaflets. The leaflets have razor-toothed edges that can reach 2 to 4 inches long and are arranged opposite along the leafstalk.



## BARK

This shrub can grow up to 13 feet tall. The bark is light grey and smooth when immature but becomes coarse with a darker grey bark. Older stems can be hollowed out whereas the younger stems have large white piths in the center.



## FLOWERS

The white flowers are very floral smelling. The flowers are in clusters that lay flat and span across 10 inches. There are about five clusters of petals on each stalk. The tiny individual flowers have 5 petals and are no wider than 1/4 inch wide.

Many flowers in the wild can look like this, it is important to note the other characteristics when identifying, as some can be very toxic if not properly identified. Elderberry flowers appear in spring-fall. The flowers are edible, but it is important to let them be if you desire the fruit more.

The fruit of elderberries is 1/4 inch large, dark, round, and glossy. These purple berries hang in clusters where the flowers once were, these are known as drupes.

Berries are considered toxic if eaten raw but edible once cooked. Each berry has up to 5 large seeds. The fruits help with inflammation due to their antioxidants and vitamins, helping to clean and regulate the blood.



## HARVESTING

Although there are many species of elderberries, only the purple and blue berries are edible. The ripe fruit is usually ready in the later summer months from late July to mid-September in northern climates. Elderberries have a sweet yet tart flavor, some have referred to them as tasting like earthier blueberries or blackberries.

## STORAGE

Always cook berries before consuming.

Fresh: 1-2 days

Frozen: 6 - 10 months

Dehydrated: 1 year

DO NOT  
Eat  
RAW

Elderberries contain a toxin similar to cyanide and can cause upset stomachs





# FIDDLEHEADS

Latin: *Matteuccia struthiopetris*

Common name: Ostrich Ferns or Fiddleheads

## MAJOR USES:

- Pickled
- Fermented
- Baked
- Roasted
- Breakfast quiches
- Soups
- Salads

Fiddleheads should have a crispy texture and can easily be overcooked if not given close attention.

Fiddleheads can last up to a week in the refrigerator, a year plus in the freezer, or when canned or dehydrated and stored properly can last around 18 months.

Fiddleheads' ability to withstand cold temperatures means they can be found throughout the *Northeast, Midwest, Canada, Europe, and northern Asia*. Ostrich Ferns are specifically found in *Eastern Woodland* areas. Fiddleheads prefer very wet soils and are usually found alongside rivers, banks, streams, and in wet woods and floodplains. These soils are typically sandy and rich in organic matter.

## ROOT SYSTEM & CROWNS



Fiddleheads are deciduous perennials that have underground shoots and roots that form a system known as rhizomes. As the ground begins to thaw and the banks of the rivers start to dry up, Fiddleheads emerge from their crowns, covered in a brown papery skin. The crowns themselves resembled upside-down pinecones. The fiddleheads grow in numbers of 6-12 from the top center of the crowns. As the fiddleheads begin to mature the brown paper skin will fall off, revealing a green glossy skin that is smooth and free of hairs.



## STEMS

The stem of the fiddlehead will also have a u-shaped groove. As the ferns unfurl, fanning out, they can stand up to 4 feet tall. The plumed-out ferns are thought to resemble ostrich feathers hence the name Ostrich Fern.



## LEAVES

The leaves like most ferns are compound with 25-60 leaflets per stalk. The leaflets are arranged opposite arranged along the stalk of the leaf and taper at each end with the middle being the widest part of the leaf. The leaflets have razored edges that have 20-40 pairs of lobes. The leaflets can reach up to 6 inches long.

## HARVESTING

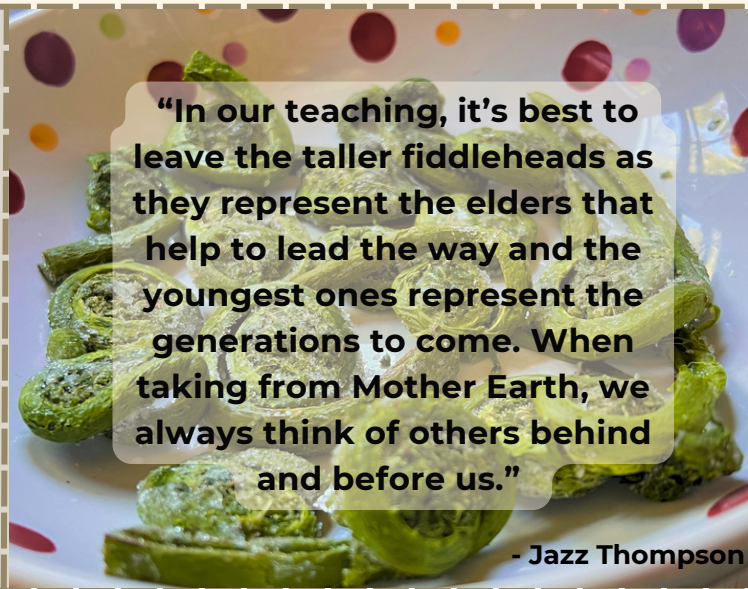
Fiddleheads season lasts from mid-April to mid-May depending on conditions. When harvesting fiddleheads, you want to make sure they are around 2-6 inches from the base of the crown. If you pick too close to the crown that can affect the health of the crown, once they reach over 8 inches they are past their prime. Take care not to damage the other ones, as they need more time to grow.

Fiddleheads are tender and best picked by hand. Knives can easily cause damage to the other fiddleheads. When removing the fiddleheads from the crown, gently snap it backward. It's important to not take more than half the number of fiddleheads present on the crown. This helps to maintain the vigor of the patch, preventing it from being overharvested. Location is also important, make sure not to harvest close to the roadside, as run-off can contaminate the soil.



**"In our teaching, it's best to leave the taller fiddleheads as they represent the elders that help to lead the way and the youngest ones represent the generations to come. When taking from Mother Earth, we always think of others behind and before us."**

- Jazz Thompson



## PROCESSING

Use foresight when picking fiddleheads, as the time it takes to process fiddleheads is important. If fiddleheads are not processed quickly enough, they will begin to brown from oxidization. It is important to process them right away to hold their color, taste, and nutrients.

1

Separate the brown papery covering from the fiddleheads. This can be done several different ways from winnowing, rinsing, hand-cleaning to sifting.

2

Once you remove all the brown skin, fill a sink or bucket with cold water and rinse off any dirt and bugs from the fiddleheads.

3

It's important to blanch fiddleheads before any method of storing or cooking. To blanch bring a large pot of salted water to a boil. Blanch the fiddleheads anywhere from 2 minutes or longer if preferred.

4

After blanching, immediately drain them and transfer them to iced water to halt the cooking process. Lay them flat in a place to dry for 20 minutes before storing.





# JERUSALEM ARTICHOKE

Latin: *Helianthus tuberosus*

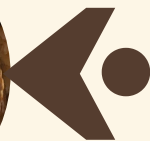
Common names: Jerusalem artichokes, Sunchokes, Wild sunflower

## SEEDS

Seeds are much like sunflower seeds but much smaller making them less desirable to consume and are no longer than 4mm. The shell of the seed is very narrow and is striped with light and dark brown colors. The seed attracts all kinds of birds in the later season.

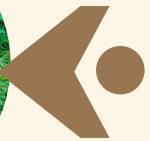


Jerusalem artichokes are a species of native sunflowers located in central *North America*. Jerusalem artichoke tubers have been cultivated by Indigenous people of Turtle Island as a root vegetable. The tuber's ability to propagate is versatile in dry and wet conditions. This tuber can be found on the sides of riverbanks, streams, low lying, and rich upland forests. Although due to its adaptability can be planted anywhere that has an adequate amount of moisture and sunlight, this plant can withstand a wide range of areas, including fields, grasslands, and soils with disturbed soils. This plant is not well adapted to hot climates, thriving in cooler climate conditions.



## ROOTS & TUBERS

This plant is an herbaceous perennial and spreads through underground rhizomes by the tubers and by seed, though more successfully through the tubers. The tubers resemble a mix between a ginger root and a potato. Tubers can vary in shape and size but are normally elongated with colors ranging from yellow. red to brown and purple. These tubers tend to dry up quickly after being exposed to air. The inner parts of the Jerusalem artichokes are white and crisp.



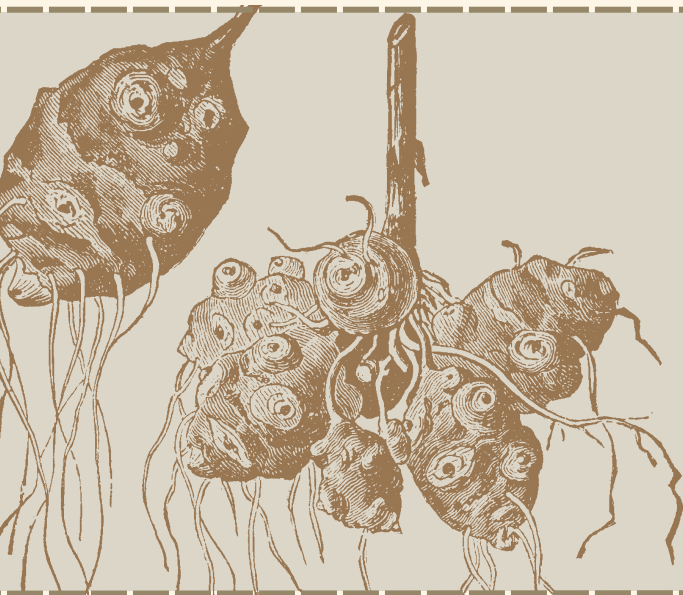
## STEMS

The stems are hairy and multibranched, that can reach up to 10 feet tall. The stems can range from a light green to reddish-brown. These plants produce dense colonies and tend to block out other weeds.



## LEAVES

Leaves have winged petioles, that are long, oval, and pointed at the end. The leaves have sharp-toothed edges and a rough hairy texture with 3 veins running through the leaf. The leaves can reach up to 8 inches long and 4 inches wide, growing smaller up along the stem of the plant. The lower leaves appear opposite whereas at the top they begin to alternate. The leaves of this plant are what distinguish it from the other sunflower species.



## HARVESTING

Crops are typically gathered after the frost. Pull the tops out of the soil and dig up the tubers from the soil. Since the skin of the tubers is very thin it's important to handle them with hard upon harvesting and transporting and should be stored in a cool and humid environment that is around 32°.



## USES

Tubers are now cultivated worldwide. Tubers are rich in carbohydrate inulin. The tubers can be used much like potatoes in different soups, roasts, sautés, and baking. Jerusalem artichokes can also be eaten raw and used in salads or in quick pickles and is like a water chestnut. Raw Jerusalem artichokes tend to have a nutty and sweet flavor and, when cooked taste like an artichoke.

Jerusalem artichokes can cause some people to have flatulence and gastric pain, always make sure to test out a small amount to see how the body reacts. Studies have been done where it has resulted in increasing the microbial biome of the gut. The process of fermenting beforehand has shown great results. When cooked it becomes soft like a potato. The roots and tubers can be turned into a powder and used as a thickening agent and add a sweet flavor. Flowers are edible and can be used to garnish plates and the leaves and petals can be dried for teas.

Jerusalem artichokes are also high in iron, phosphorus, copper, and B vitamins. These all help to suppress inflammation within the body, allowing it to store energy, making the body more efficient to process and function correctly.

## FLOWERS

Jerusalem artichokes are in the sunflower family. Flowers are sunflowers that are bright yellow with a purplish-brown center have up to 20 petals and span across 3 inches. Bloom lasts from August to October. The flowers are noted for being pollinator-friendly.



# SEAWEED

Latin: *Palmaria palmata*

Common names: Dulse, sea lettuce flakes

Passamaquoddy: Tals

Photo credits: Voctir, Jonas Drotner Mouritsen

## FACTS

- Dulse provides a habitat for all kinds of sea life including snails and sea urchins that like it as a snack.
- Dulse was used back when settlers were first arriving and used to treat scurvy.



Dulse is a red algae or seaweed that grows in the northern regions of the *Pacific* and *Atlantic oceans*. It can be found growing on boulders and ledges, forming thick vegetation in low to mid-intertidal areas with lots of different water currents that tend to have exposed shores during low tide.



### HOLDFAST

The root-like structure of dulse is a holdfast that can help the plant to anchor itself in place to prevent it from being carried away. This holdfast attaches itself to rocks, boulders even mussels. The holdfast is not actually considered a root system though it can be structured like one. It's functions serve an entirely different purpose.



### FRONDS, BLADES & THALLUS

Vary in size, shape, and color which are from deep red to a reddish-purple. There are segmented blades that can reach up to 20 inches long and 1-3 inches wide. The texture is leathery with very smooth edges.



### HARVEST

This plant has been harvested around the world for thousands of years by many different cultures and is a staple in some people's diets. Dulse can be harvested year-round, but spring and fall tend to be the better season for harvesting. The seaweed can gently be pulled from the rocks by hand.

## STORAGE

### FRESH

**7 - 10 Days if Refrigerated**

### FROZEN

**1 Year**

### DEHYDRATED

**2 Years**

## USES

Contains high amounts of iron, iodine, potassium, and micronutrients. High in omega 3 and 6 fatty acids and other antioxidants. Dulse is a good source of protein and fiber.

Dulse can be consumed fresh or dried and used in many forms. It can be added to salads, soups, stir-fries, dehydrated into powders, chips, and flakes, and used for seasoning adding a very umami flavor to dishes.

Dulse is good for people with thyroid conditions, vision impairments, and digestive issues and helps to promote healthy bones, and clean blood while aiding in the immune system. It can also be used topically and help many skin ailments.

**ALWAYS WASH  
before  
CONSUMING**





# SHAGBARK HICKORY

Latin: *Carya ovata*  
Common names: Shagbark Hickory, Scaly bark Hickory

## SEEDS

The fruit of shagbark hickory is in the walnut family, producing nuts that are encased in a hard round green shell. The outer husks can reach up to 1 1/2 inches long and eventually split open revealing a 4-sided brown nut. The nuts provide a sweet and very nutty flavor, similar to pecans.



Shagbark Hickory is a deciduous tree that is found Hickory found in Eastern and Midwestern parts of the US and parts of Canada. This tree can withstand dry and compacted soils as well as flooded areas that are shaded but prefer to be in partial to full sun areas with moist soils and humid climates. Shagbark hickories can be found growing in forests with other pines, maples, oaks, and other hickories.

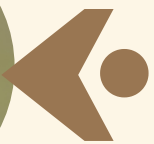


## BARK

Shagbark Hickories when young have smooth and light grey bark with straight parallel grooves. As the tree begins to mature, large plates form on the tree that can run up to 3 feet long and begin to curve upward, giving it a shaggy appearance. The bark also turns brownish-gray and can easily peel off. The tree can grow to be up to 100 feet tall and 50 feet wide, though it is slow growing.

## FLOWERS

The Shagbark flowers are produced in mid-spring and produce male and female flowers that appear yellow-green. The male flowers appear first, in clusters known as catkins, and can grow to 5 inches long in clusters of three. In springtime, new leaf shoots form above the male catkins. The females are small egg-shaped flowers that are covered in tiny hairs and in clusters of 2-4 with spiked tips. The female flowers eventually form into the fruits of the tree and are located above the leaf shoots.



## LEAVES

The leaves of Shagbark Hickory are palmately compound with typically around 5 leaflets. The leaves themselves can be 1-2 feet long, with the terminal leaflet is the largest. The leaves are smooth and green with a paler color underneath and eventually turn to a golden-yellow to yellowish-brown. The leaflets are ovate, smooth and shiny with razored edges. The veins running along the midrib alternate along the leaflet.



## HARVESTING

The fruit can be unpredictable in fruit production and only happens once the tree reaches 10 years yielding higher amounts at 40 years. The tree only produces every 3-5 years in early September throughout September. The nuts that have fallen from the tree are ripened and are brown and split open. The best way to determine if the nuts are viable is after setting the nuts aside for a couple weeks, perform a sinking test later to determine if the nut is fresh or rotten. Rotten ones will normally float, whereas the viable ones are denser and will sink. If storing nuts for long periods of time always make sure to cure them for at least 2 weeks before storing away, this ensures the shelf life of the nut. Hickory syrup is also available from Shagbark Hickory syrup can be collected year-round. The bark is best collected in early spring to late fall- winter.



## USES

- **Algonquins** have been harvesting hickory nuts for centuries and made nut milk.
- **Cherokee** make kanuchi which is hickory nuts boiled in water.
- Inner bark is used to make tea by **Iroquois** to help inflammation with things like arthritis as well as collect the sap and create salves.
- **Potawatomi** uses the bark for inflammation as well both internally and topically.
- **Ojibway** uses the young shoots to help alleviate headaches. The tea could also be used as a diuretic and astringent.

The bark is a high source of Vitamin A, Vitamin B5, potassium, magnesium, and calcium. They are a great source of fats, proteins, dietary fibers, and calories and are low in cholesterol. The wood of hickory can also be used for smoking meat as well as making bows and drumsticks.

## STORAGE

### Nuts:

*\*Always perform sinking test and cure nuts before storing.*

- **Fresh: 6 months - 1 year**
- **Frozen: 1 year +**

### Syrup:

- **Canned: 1 year +**
- **Refrigerated: 6 months +**

### Dried bark:

- **Fresh: 6 months - 1 year**
- **Frozen: 1 year+**



# SUGAR MAPLE

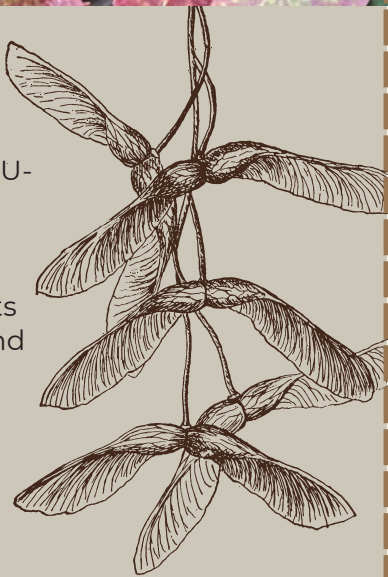
Latin: *Acher saccharinum*

Common names: Sugar, Rock Maple, Hard Maple

In Penobscot: ssènaw (sin-naw)

## SEEDS

The fruit of sugar maples have a winged nutlet or double samara that is around 1 inch long and is U-shaped. They are commonly referred to as “helicopters” or “spinners” due to how they descend to the ground. The fruits appear bright green in spring and turn to a light brown in the fall. The tree also relies on the seeds found within these fruits produced by the mature trees.



## BUDS

The buds that form in early spring are no larger than ¼ of an inch, sharply pointed with purplish-brown tightly overlapped scales. There are two lateral buds aside from the terminal bud.

The sugar maple tree is native to the *Northern* parts of the *US* and *Eastern* Parts of *Canada*. Sugar maple trees prefer cool and moist climates where the winters are cold. They can be found in a range of soils but prefer well-drained soils that are loamy and abundant in organic matter. Sugar maples are shade tolerant and are found growing in forests with other trees like oak, spruce, hemlock, birch, and poplar.

## BARK

The saplings and younger branches of sugar maples are grey with a smooth and grey. The more mature bark will become a dark gray with a shaggy appearance. The mature bark also has large plates that begin to curl, the ridges will appear vertically and overlap one another like shingles.



## LEAVES

Sugar maple have leaves that are oppositely arrange that are up to 6 inches long with typically 5 palmate lobes. The upper 3 lobes have a squarish shape to them, whereas the bottom lobes are rather pointed. The edges of the leaf also appear very smooth and are toothed sparingly. The notches of the lobes appear rounded. The stem is about the same length as the leaf and is hairless and appears a purplish-red at the base of the leafstalk in early Spring. The leaves are green on top and have a paler tone underneath. Sugar maple leaves in the fall time can range from yellow, gold, orange to red and can display these colors all at once.



## FLOWERS

The flowers both contain male and female flower that self-pollinate. The flowers appear greenish-yellow with clusters of 6-12 flowers that droop downward with slender stalks that are hairy. The flowers are anywhere from 1-2.5 inches long. The flowers appear before the leaves emerge and the bloom can last from April-June.



## HARVESTING

Most trees can produce syrup, it is the Sugar Maple that is sought after for market shelves because of its high sugar content and it's ability to yield sap. The tree tapping can vary from year to year depending on the temperatures. Once the buds begin to form and the freezing temperatures are no more, the syrup harvest has passed.

the hole should be drilled at a slight upward angle about 2 inches into a tree with a 10-inch diameter, standing 4 feet above the ground.

One taphole can yield anywhere from 40-80 gallons of sap in a year,

when boiled down 40 gallons of sap produces generally around 1 gallon of syrup and 10 gallons of sap equals to 1 quart.

It is recommended to boil sap outside of the home because the large amount of moisture it puts into the air.

## STORAGE

Canned syrup can last for years when properly sealed. The syrup should be stored in a dark, dry, and cool place and once opened should be refrigerated. You can also freeze maple syrup which can be stored for up to a year or more.



## USES

This species is vital to the ecosystem where it inhabits, providing food and shelter to a wide variety of life. The bark, twigs, and fruit are a source of food for many deer, moose squirrels, and porcupines. Many birds also build their nest and can act as buffers to help clean waterways and reduce the carbon dioxide in the air. The tree's roots and leaves also can improve the health of the soil.

Tribes all over the Northeast and Midwest would use the maple syrup components and find different ways of incorporating it into their meals. There is a record of Ojibwa people using it in vinegar mixtures to flavor their meats. Many tribes would also use the lumber for different tools and even for canoes and paddles. The sap was also used by the Iroquois to treat the eyes.

The young leaves can also be eaten raw and cooked, though moderation is essential. The seeds and bark can also be collected and be eaten raw or roasted and ground into flour. In my culture, the maple water was used as a tonic, which helps to boost the liver and kidneys. The inner bark was also cultivated to fuse into a tea that can help remedy coughs and digestive issues. Anishinaabe would also used to bark to treat gonorrhea.



# SWEET FERN

Latin: *Comptonia peregrina*

Common names: Sweet Fern

In Penobscot: enik<sup>w</sup>simosi (meaning “Ant Bush”)

## FLOWERS

This shrub also produces tiny little clusters of flowers known as catkins. The female catkins are more bur-like whereas the male catkins are elongated and can reach about 2 inches in length. They are erect in winter and when they bloom dangle downward and blossom in April-June, depending on the climate. When in bloom the catkins pollinate mostly by wind, although pollinators can assist such as the Gray streak butterfly.

## NUTLETS

The fruit on these shrubs appear like miniature chestnuts and span around 1/2-2 inches. The nuts or nutlets are bright yellowish green in the early part of spring and turn into more of an olive color that develops a savory flavor.

Sweet fern is not an actual fern but rather a deciduous shrub found in *North America* ranging in parts of the *Midwest* and all along the *East Coast* into *Nova Scotia* and into the *Great Lakes region*.

Sweet Fern can be found in areas of sterile and sandy soils. In coastal areas, this plant can be found next to junipers, beach plums, and beach roses. Further inland, you can find wild sarsaparilla, serviceberries, hazelnuts, bracken fern, wintergreen, oak, white pine, and blueberries next to sweet fern.



## STRUCTURE & ROOT SYSTEM

Sweet Fern is a perennial shrub that spreads itself by underground runners also known as rhizomes. They grow alongside marshy areas in sandy soils that tend to be very acidic and prefer full to partial sun. They are also found in grasslands, meadows, fields, savannas as well as and wooded areas. Sweet fern thrives in colder climates ranging from zones 2-6.

## STEMS

Sweet Ferns can be recognized by the several woody stems that spread loosely from the base of the plant– this is what distinguishes this plant from actual ferns. The bark can be brown with a copper tone, smooth, and thin. Its branches grow denser near the top of the plant, reaching up to 3 feet tall and 6 feet wide.



## LEAVES

Sweet Fern leaves appear bright green when young and turn to a darker green as they mature with a paler green on the underside of the leaf with a slight fuzz, the leaves also curl upwards. The leaves are 2-5 inches long and 1/2 an inch wide and have a texture that can appear glossy at times. The edges of the leaves have toothed edges that are rounded and alternate along the leafstalk, tapering at the end. When crushed they become very aromatic, even simply brushing past the plant can release its beautiful smell.



## HARVESTING

Whenever harvesting, it is always important to know the well-being of the plant. In several states this plant is considered endangered; in these areas, Sweet Fern shouldn't be harvested. It takes this plant a while to establish itself, but once secured will continue to grow and spread itself underground each year

### NUTLETS

Nutlets can be harvested in early spring or collected at the same time as blueberries, usually around late July early August. In fall, when the nutlets turn to an olive color, the husk is no longer as edible, but (when crushed and dried) can be used for seasoning. Harvest nutlets for seasoning when they become available in the fall months, in September-October.

### LEAVES

Leaves can be picked in early spring throughout summer into fall. The earlier leaves are lighter in flavor, whereas the fall leaves tend to have an earthier aroma. When harvesting the leaves fresh it is best to do so after the dew has dried off the leaves and before the oils disperse out of the leaf during the day.

## STORAGE

To store leaves you can simply leave them flattened out in an area to dry, or can dehydrate them at 110 degrees for 1-3 hours depending on the amount you are dehydrating.

## USES

Nutlets can be used to add a lemony flavor to salads, and sautés and infused into other recipes where you want to brighten up the flavor.

Both the nutlets and leaves can be dried and crushed into a savory powder or left to dry and used as a substitute for bay leaves.

When used as a tea, sweet fern can be used both fresh and dried. Bring water to a boil, and let the water sit for a couple of minutes before pouring over the leaves, for a cup of tea you only need about two teaspoons of leaves. Let the leaves steep in the hot water for a few minutes. You can also do a cold-water infusion with the leaves. For every cup add again two teaspoons of leaves and let sit overnight in the refrigerator. You can sweeten your teas with honey, maple syrup, or sugar.



# WILD STRAWBERRY

Latin: *Fragaria virginiana*

Common names: Wild Strawberries

In Penobscot: Mskihkəwimin

## FRUITS & SEEDS

One single strawberry contains multiple tiny fruits - the red of the strawberry is actually a fleshy part holding the tiny fruits together. These tiny fruits are known as achenes (ak-keens) and the seeds themselves are encased in them. These seeds can become new plants but the chances of the plant reproducing are more successful through its runners.

The range for wild strawberries spreads across *Eastern North America* and into parts of *Southern Canada*. Wild strawberries can withstand a vast climate, like cold temperatures in the north. This plant's ability to adapt and thrive amidst climate change, through frosts, floods, drought, and late snow is just as amazing as the sweet and unique flavor it has to offer.

## STRUCTURE & ROOT SYSTEM

An herbaceous perennial, meaning their roots stay dormant throughout the winter months and burst back into life in Spring, Wild Strawberries are a ground-hugging plant with the ability to suppress invasive plant species.

Wild strawberries have runners that spread out from the crown, also known as stolons. These runners eventually develop their own root systems becoming a daughter plant. The stolons appear a bright red, shooting out from the nodes of the leaves and spreading out, up to 2 feet long.

## LEAVES & STALKS

Wild strawberry plants can grow up to 7 inches tall. The plant is primarily made up of several trifoliate leaves that emerge from a hairy leafstalk. The leaves themselves are made up of leaflets that are oval-shaped and have toothed edges. There is a midrib running down the center of the leaves with veins running to the edges of the leaf. The undersides of the strawberries are light green whereas the tops are a darker green. There is only one leaf per stalk and three leaflets per leaf.

## FLOWERS

Wild strawberries have flowers that usually bloom in June. The flowers have 5 white petals with a yellow center that consists of the anther and pistil, which are the male and female parts of the flower that self-pollinate (though pollinators help to complete the process.) The flower itself is around 1-3 centimeters wide. The petals eventually wilt away and, in the center, form the strawberry, which can take anywhere from 4-6 weeks to ripen.

## HARVESTING

### LEAVES

All the parts of wild strawberries can be used from the leaves all the way down to the roots. The leaves can be harvested throughout the season, although the young leaves, just before blossom, tend to have the most flavor.

### FRUIT

The fruit is ready to harvest when the strawberry easily comes off the fruit truss with a gentle tug. When you harvest strawberries, you can also cut off a part of the stem at the top of the berry to help preserve the fruit. The fruit is no wider than 1/2 inch, the berries can grow quite large in the right conditions.

### ROOTS

The roots are best to harvest at the end of the growing season after the vegetative growth has died back, making more of the energy focused into the root system.

## USES & STORAGE

At harvest time, it quickly becomes apparent that collecting enough berries for a jam or salad can become quite labor intensive. But, it can be done, although it depends on the amount of berries present, and the patience given to the project.

You can also store them fresh in a jar with a lid so they'll last another couple of weeks. Properly canned jam can be shelved for a year or more and frozen berries can be kept in the freezer for about the same time.

The leaves and roots can also be dried and stored and used for medicinal purposes in teas, tonics, and tinctures.

You can also add strawberries to baked goods or incorporate them into sauces or dressings.





# WOOD SORREL

**Latin:** *Oxalis stricta*

**Common name:** Woodsorrel, Common Yellow Wood sorrel, Sourgrass

**In Penobscot:** sawáskihko

## MAJOR USES:

- Source of vitamin C
- Treat inflammation
- Reduce fever
- Relieve nausea
- Rheumatism, gout, and kidney stone treatment while also consuming calcium-rich foods.

This perennial herb grows in both shaded areas and full sun but requires a sufficient amount of moisture. This plant is found throughout *Southern Canada and North America*. The Wood Sorrel family is quite large and vast, this plant is often confused with clovers but isn't in the same family. This plant can be found growing closely to other sorrels, clovers, blackberries, and strawberries.



### ROOTS

Long tap root systems produce multiple stems from the base, sprawling across the ground and sending out new shoots. The nodes typically sit upon the soil but do not root. The tap roots themselves do form tubers that are rather starchy.



### STEMS

Stems are smooth and can have a slight fuzz. The stems tend to hug the ground and are considered a creeping plant. The stems can reach out as far as 9 inches.



### LEAVES

Leaves are a light green that alternate along the stems of the plant. The leaves are palmately compound like a clover leaf, the leaves are 3 heart-shaped leaflets that fold inward from the midvein. The leaves are no larger than 1 inch. Once mature the leaves turn to a darker green and can have a purple hue. At night the leaflets fold up and open during the day.



## FRUITS

One characteristic that defines common wood sorrel from all the other sorrel is the fruit of wood sorrel. The fruits resembled tiny little okras that grow upward on the stems at a 90-degree angle, and are cylindrical and hairy. The pods are green with a red hue to them, with tiny red coarse seeds inside ranging upwards towards 50.

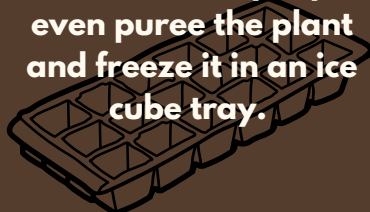
The plants themselves can produce over 5,000 seeds. The seed pods are also known to explode when ripe, flying quite a few feet in the air. This is great evolution in how the plant is designed to propagate itself.

## FLOWERS

Yellow flowers are in clusters of 1-2 at the end of each stalk, extending above the leaves. The flowers consist of 5 yellow petals. The flowers themselves are no larger than 1/3 of an inch on stalks that stand taller than the rest of the plant. This plant can bloom all year in warmer regions but typically only goes from the Spring into the Fall

## STORAGE

The whole plant can be dried, stored, and used later. Freezing the plant can also preserve it if the fresh flavor is desired, some people even puree the plant and freeze it in an ice cube tray.



## HARVESTING

All parts of wood sorrel are edible and are best consumed fresh, the older the plant becomes the tougher the stems are. The plant can be eaten raw or cooked and has a lemony flavor. This herb pairs well with different meats and fish and can be used in salads as well, or sauteed with other vegetables.

**DO NOT  
over  
CONSUME**

Wood sorrel contains oxalic acid which can have negative effects if over-consumed.

