Edible Plants

Remember that when a person sets out to gather wild edibles, he or she must do so with a great deal of caution. Some people, for example, might have allergic reactions to otherwise “safe” plants, and a number of factors—including the time of collection and method of preparation—can make a big difference in both the safety and the palatability of many free foods. You should never, of course, pick plants close to roadways, polluted waterways, croplands, or any other place where chemical sprays or fumes could have contaminated them. Furthermore, the forager should never eat a plant that looks unhealthy, or one that he or she can’t identify beyond the shadow of a doubt. Whenever my survival school students collect wild edibles, I ask them whether they’d stake their lives on their ability to identify the species at hand because that, in fact, is just what they’ll be doing when they eat it. So use a good Held manual on the subject preferably one that contains both sketches and photographs showing leaf, root, flower, and stalk structure, and—when possible—get some training from a wild-plants expert in your area (both the common names of and, surprisingly, the appearance of some plants will change from one locale to another). A person in a survival situation will likely find that roots and tubers are most easily gathered with a “digging stick” (a sturdy branch pointed at one end). When working in rocky soil, it’s a good idea to fire-harden the point by heating—but not burning—it over glowing coals. The digger is then pushed into the ground next to the plant, and the root is levered out. To collect seeds, tie a shirt in the form of a bag (wrapping the sleeves around the neck hole to close it) place the seed heads in the sack and shake the kernels loose. Or, you might want to make a willow hoop out of a flexible sapling and place the shirt over it to form a shallow tray into which seeds can be knocked off.
Oaks

All acorns are edible, though some are a good bit sweeter than others. However, if you simply shell one of the seeds and take a bite, it's likely that you'll immediately be turned off by the very astringent, burning quality typical of most oak nuts. Fortunately, you can leach out the tannic acid that makes them bitter, and the easiest way to do so is to shell the acorns, smash them (you'll want to break them up but not pulverize them), wrap the pieces in a cloth, and place them in a stream for about half a day (longer, if they haven't lost their unpleasant taste by that time). Another method is to boil the nuts, changing the water frequently, until the flavor appeals to you. Once they're leached, the acorns can be eaten raw, toasted, added to stews, or pounded fine and mixed with wild-grain flours to make bread. They're a valuable source of proteins and carbohydrates that's available from early fall until well into the next spring. And acorn sprouts can be prepared in the same ways as the nuts themselves, or—in the case of most white oak species—can be eaten right off the ground.

Grasses

Of the many grasses found in North America, all but a few are edible, with their seeds being the most palatable part. However, it's best to select grasses with large seed heads or clusters, since trying to collect small ones would likely be a waste of vital energy. The seeds should be dried and parched, then winnowed to remove the chaff. The kernels can then be toasted and eaten plain, added to stews, or ground into flour for bread. Some of the best, safest, and most widely available grasses are crab, goose, foxtail, blue, rye, and orchard, plus wild oats and millet. Eat the Weeds by Ben Harris (Keats, 1973, $1.50) and Handbook of Edible Wild Plants by Euell Gibbons and Gordon Tucker (Donning Company, 1979, $4.95) are both good sources of information on edible grasses.

Pines

Not all evergreens are edible, but the Pinus (pine) species are. These trees offer a wide assortment of munchables that are all easily collected and prepared. You can, for instance, add the pollen to stew as a thickener and to bread for flavor. And if you heat the cones gently by a fire until they open, the seeds can be easily extracted. These can then be eaten raw, parched and winnowed, or shelled and baked—depending on the species—and added to soup and bread. Use pine needles (along with those from spruce and hemlock . . . but be sure you're not gathering the needles from the red-berried, poisonous American yew, Taxus canadensis) to make a nourishing tea. You can also dry the inner bark of pine, spruce (Picea species), and hemlock (Tsuga canadensis) and add it to stew and bread.

Cattails

Found along marshes, lakes, and streams. In early spring the roots are edible and choice. They can be peeled and eaten raw, but Survive Outdoors strongly suggests boiling. It can be served with butter and seasoning to increase the flavor. The pollen of cattails can be shaken into bags and dried and used as a protein rich flour for cooking. Cattails at this stage with the brown tops can be soaked in kerosene and used as torches for light. Although the burning time may be short, it is a useful light source. Dried tops also make a great tinder for starting fires. The cattail (either Typha latifolia or T. angustifolia) can be utilized at almost any time of the year, because at each stage of its life cycle it has a number of edible parts. For example, you can mash the root up in cold water to separate the soluble starches, and—once these have settled, and the fibers and water have been removed—add the material to stew or mix it with other wild flours to make bread. The new shoots can be eaten raw, and those up to a foot tall may be prepared like asparagus. The head, before it emerges, can be cooked and eaten like corn on the cob. Finally, it's possible to collect cattail pollen for use in soup or as a flour. The rhizome is often very tough but is a rich source of starch. Pound the rhizome to remove the starch and use as a flour. The pollen is also an exceptional source of starch. When the cattail is immature and still green, you can boil the female portion and eat it like corn on the cob. The dried leaves are an excellent source of weaving material you can use to make floats and rafts. The cottony seeds make good pillow stuffing and insulation. The fluff makes excellent tinder. Dried cattails are effective insect repellents when burned.
Clover
Many clovers are edible, the best being the red, sweet, yellow, white, white sweet, buffalo, alsike, and crimson varieties. Boil or steam the flowers and new green leaves and eat them as you would spinach. Tea made from the dried flowers is also relatively high in food value.

Mint
Most members of the mint family (Mentha species) can be used as tea or provide flavoring for other foods and drinks. For example, you can steep the green (or dried) leaves for a short time in hot water and add the liquid directly to a stew.

Violets
The new, green leaves of the Viola species can be cooked as a green, added to soup as a thickener, or eaten raw in a salad. The dried leaves, on the other hand, make excellent tea that's high in vitamin A. Taste is very bland, and the leaves will be most appealing when mixed with other greens.

Dandelions
This common weed found in many a yard is a very useful plant. The yellow flower can be rolled in flower and fried, and is delicious. The leaves when the plant is young can be used in a salad and eaten like lettuce. The root can be dried, baked and ground and used for coffee. You can eat the tender leaves of Taraxacum officinale raw or cook them like a potherb... if they're gathered before the plants bloom. The mature flower itself is tasty when dipped in a batter made from wild-grain flour and fried like a fritter, while ground dried roots make an excellent hot drink.

Spicebush
The spicebush is the forerunner of our modern allspice, and the pioneers dried and powdered its berries to make a versatile flavoring. For a zesty tea, steep its bark, young twigs, and young leaves in warm water for about ten minutes. (This beverage is flavorful, but its food value is quite low.)
Miner's Lettuce
The Montia species (which belong to the same family—Portulacaceae—as purslane, another popular edible green) are available during much of the year, and these typically small, low-growing residents of damp places make a good cooked vegetable. It's also possible to eat them raw or add them to soup and stew. (The new, small leaves have the best flavor.)

Sumac
All of the Rhus species are edible, with the exception of poison sumac, which can be distinguished from the others by its loose clusters of white berries and the absence of teeth on the leaves. To make a good tea or cold drink from the bright red stag-horn, smooth, and winged sumac berries, just bruise the clusters in cold water ... let the brew sit for ten minutes,. strain it and drink the beverage hot or cold. You can also make a fine soup with a fruity flavor by heating the berry clusters and then straining them out before eating the broth.

Greenbriers
The new green leaves, sprouts, or shoots—as well as the young tendrils—of the Smilax species can be eaten raw or cooked. In many parts of the country, greenbriers have edible parts from spring through the middle of autumn.

Amaranth
You can roast and grind the seeds of the mature plants of Amaranthus species into a rich flour. The young leaves can be eaten raw, added to other cooked vegetables, or put directly in stew. (This food source is available, in many areas, from spring through fall.)

Chicory
When dried, roasted, and ground, chicory (Cichorium intybus) roots will brew up into a coffeelike hot drink, and the new green leaves can be cooked as a potherb or simply added to stew. Also, the blanched white part of the new leaves at the plant's base are tasty when eaten raw . . . alone or in a salad.
**Stinging Nettles**
The stinging nettle (Urtica species) is a very good survival plant, since it can be found in many areas of the country. Steam or boil the young shoots or leaves to produce a great cooked green. Or boil the older leaves for ten minutes, then strain out the fibers, to make a tea. Be careful, however, when handling this plant: Its "bite" is very painful, but fortunately, the stinging capability is destroyed by cooking. (The plant's stem fibers, by the way, make good cordage.) Stinging nettle shoots make great cooked greens and the leaves produce a tasty tea.

**Roses**
It's possible to steep the fresh petals of the Rosa species in hot water to make a very tasty tea. Also, the dried and pitted rose hips can be eaten raw and make an excellent survival food, because they can often be found throughout the winter and are packed with vitamin C.

**Chickweeds**
Chickweeds of the Stellaria and Cerastium species make very good cooked greens, and all but the mouse-eared type can be eaten raw (although some people don't care much for the taste).
Great Burdock
The young green leaves of Arctium lappa can be eaten raw or prepared as a potherb for a quick survival food. The roots of first-year plants must be peeled of their inedible rind, and can then be boiled—in two changes of water—for 30 to 40 minutes and eaten like potatoes.

Water Lilies
Almost all waterlilies (Nymphaea and Nuphar species) are edible and can be gathered most of the year. During the summer months, when the rootstocks become mushy and rather tasteless, they're still an excellent source of survival food. Additionally, the young, unfurling leaves and unopened buds can be prepared as a potherb. The seeds can be parched, winnowed, and ground into a nutritious flour, and the potato-shaped tubers of the tuberous waterlily (N. tuberosa) can be dug from the mud and prepared like—what else?—potatoes. Two of the more common edible varieties are the yellow pond lily and the fragrant pond lily. (Be careful, though, to collect any such plants from pollution-free waters!)

Arrowhead
Use a forked stick to push the tubers of this marsh plant (Sagittaria species) free of the mud, after which they'll float to the surface. Though these can be cooked like potatoes, many people prefer to eat them raw, as a nibble food. The arrowhead is an excellent survival edible because it's available throughout the year, but the roots do get bitter and soft in midsummer and are especially so when the plant is in flower.

Common Plantains
When steamed or boiled, the tender young leaves of the Plantago species can be eaten as a cooked vegetable or added to soup and stew. The very young, unfurling leaves are sometimes eaten raw. Then, too, I like to grind the parched and winnowed seeds into wild flour that has a distinctive taste and a healthful dose of protein.

Prickly Pear
This fruit's fleshy pulp makes an excellent trail-side food. The seeds of the Opuntia species can also be parched and ground into Hour, and the young pads—peeled—can be eaten raw or fried.

Winter Cress
You can eat the winter rosettes of Barbarea vulgaris raw or add them to salads, but the leaves of the spring plants must be prepared as a potherb to rid them of their bitter taste. If cooked before they bloom, the flower heads resemble broccoli, but might require two changes of water.
**Blueberries**
They are familiar to most people in Canada and the USA. They do grow wild in many places, and the blue berries are delicious when ripe. The flowers are said to be edible as well. They are variously known as Blueberries, Huckleberries, Bilberries, and Deerberries, among other common names. When berries start to form they are white at first, and are not edible in this stage.

The flowers. They appear sometimes very early in the season, in early to mid spring.

**Garlic Mustard**
A seriously invasive alien plant. Left to itself, it can completely take over an area, crowding out all native plants. Feel free to pull up (and eat) as much of this plant as you can. Here's a few photos of individual Garlic Mustard plants, to aid you in identifying it.

Garlic Mustard flowers. The crushed plant smells of garlic, hence its name. This plant can completely take over an ecosystem. To prepare Garlic Mustard, simply boil or steam the whole plants (the part that's above ground). Garlic Mustard plants grow, crowding out everything else. Easy picking for food, however!
**Gooseberries**
There are several different species of Gooseberries. Some of them have many prickles, some have very few.

This is the fruit of Prickly Gooseberry. In spite of the prickles, this fruit is indeed edible.

Gooseberry-type leaf. This particular one is from a Wild Gooseberry.

These are fruits of the Wild Gooseberry. They have no prickles on them. The one below is much riper than the one above.

**Indian Cucumber**
Whorls of leaves. Yellow flowers hanging down. 1-2 feet tall. Yellow, small, hanging down. Usually only a few per plant. Simple (smooth-edged), in one or more whorls. Stems are weak and thin. Indian Cucumber Root grows in open woods and forest. It doesn't like a lot of light, but neither does it like to grow in deep shady woods. The are edible raw.
They are often found in clumps like this; it is not usual to find a single plant. Indian Cucumber Root normally grows to about 8-16" tall.

The yellow flowers. They normally hang down, as in the next photo, but when they first start to bloom, the flowers are still pointing somewhat up.

The edible part: the roots. They may be eaten raw or cooked like root vegetables. They don't require very much cooking. Note how small they are. Eaten raw, they have a very fresh taste, like a very refined cucumber.

Starflower: has similar leaves, but only one "level" of leaves -- Indian Cucumber Root usually has two levels of leaves, each in a whorl. Also, Starflower has small white flowers that don't hang down. The veins on the leaves have a different pattern in the two species. It is not edible.
Jerusalem Artichoke

Jerusalem Artichokes have small tubers on the roots that are delicious. Cook them like potatoes, until they're soft. The skin can be eaten, or you can peel them. The insides are soft and mild tasting.

Note the distinctive circular disc at the end of the stem.

Please do not rely on photos of the flower to identify the plant. There are many plants with similar flowers! The only sure way to know this plant is by the tubers.

Here is a handful of the edible tubers, washed and ready for cooking or eating raw.
**Wild Leeks**

Grows from onion-like bulbs. Leaves and bulbs smell like onions. Height is up to about 8”. The flowers bloom well after the leaves have appeared. In fact, the leaves die off and disappear before the flowers bloom. Because of the bloom time of the flowers this is classed as a “summer” plant, although it is one of the first to appear in the spring! Leaves appear well before the flowers. Wild Leeks are among the first plants to come up in the spring. Flower stem smooth, without leaves. Wild Leeks are onion-like plants that grow in the deep woods. They come up in the spring, usually before much of anything else has come up. The leaves and bulbs are edible. Please only collect when abundant, and then only collect scattered patches or individual plants. Ill effects may be experienced by some people if large amounts are eaten. If they don't smell like onions, they aren't Wild Leeks.

The leaves (and bulbs) smell like onions when bruised or crushed. Always test them until you get to know this plant.

The edible bulbs

Young shoots in spring. Wild Leeks are among the first plants to poke up in the spring. There is only one stalk of flowers per plant. The stalk is smooth. If they don't smell like onions they are not Wild Leeks.

Some individual plants in a small patch. The leaves are edible, raw or cooked. They can also be frozen or dried and used later in soups and stews.

The leaves are edible, raw or cooked. They can also be frozen or dried and used later in soups and stews.
Flower stalks starting to grow. Note that the leaves are starting to look a little pale - they die off by the time the flowers open.
Poisonous Plants

Baneberry (White and Red Varieties)
The berries from these two plants are very poisonous. As few as 5 or 6 of them can make you seriously ill. More can cause death. However, it is unlikely that you will eat very many if you are cautious, as they don't taste very good, very acrid-tasting.

The leaves of Red and White Baneberry are virtually identical. Just to confuse identification of this plant, Red Baneberry berries are sometimes white! The way to tell them apart from White Baneberry, is that Red Baneberry berries are on thin stalks and have a tiny dot at the end of each berry. White Baneberry berries are held on thick stalks, and have a large conspicuous dot at the end of each one.

The poisonous berries. This shows how the plants got it's alternate common name: Doll's Eyes. Personally, I don't think there's much danger of anyone eating these berries - they're almost creepy looking. Most cases of poisoning are with children.

Note the conspicuous dot at the end of each one. This is unique. No other plant has berries like this. The berries are poisonous. Compound leaves, with toothed leaflets. Red Baneberry berries are sometimes white, making identification of these two plants difficult for novices. White Baneberry berries are held on thick stalks, and have a large conspicuous dot at the end of each one. Red Baneberry berries are held on thin stalks and have a tiny dot at the end of each one.

Mature berries. Note the glossy bright red color. The berries are poisonous.
Canada Moonseed

This vine is most often confused with Grape vines. The berries and roots are poisonous, potentially lethal. Leaves have 3-7 angles or lobes, with the smooth stalk attached just in from the heart-shaped base. This is in contrast to Grape leaves, which are attached at the edge of the leaf. Another differentiating feature is the lack of curly tendrils that characterize Grape vines.

The roots and berries contain alkaloids, including berberine, menispine, menispermine, dauricine. Ingesting the small purplish fruits will result in convulsions or seizures. In a survival context, you would be most likely to mistake Canada Moonseed berries for wild grapes.

An overall view of Canada Moonseed vines.

If you are seeking to utilize a Grape Vine for an emergency water source, be careful not to drink from a Canada Moonseed vine instead.

Closer view of a single leaf. Note how the stalk attaches to the leaf in a little bit from the leaf edge. Grape leaves are attached to their stalks at the edge.
Poison Ivy

Poison Ivy is a poisonous-to-the-touch plant that grows in open woods, rocky areas, and fields. All parts are poisonous. The oils within the plant cause an allergic reaction in many (but not all) people, that can be quite serious. This allergic reaction manifests itself as a rash, that may show up on parts of the body that did not contact the plant at all. Sometimes people who contact Poison Ivy have a body-wide reaction, and are seriously ill for more than a week. The oils from the plant can are easily transferred to others. For example, a dog may romp through a patch of it, and then transfer the oils to people who pet the dog. It is said that the oils remain virulent throughout the winter, although poisonings from it then are probably very rare. This is tricky, since at that time the plant has no leaves; it just looks like an innocent small branch sticking up out of the ground. Obviously, ingesting poison ivy is not advisable, although some people claim that this builds immunity to the oils. Burning Poison Ivy is not advisable either, as the oils go up with the smoke. If someone was to breath in the oil-laden smoke, then they can actually get poisoned inside their lungs! The classic way to identify Poison Ivy is the "three leaves" configuration. In other words, if a plant has 3 leaves in a compound leaf configuration, assume it is Poison Ivy until you know otherwise.

In the spring, when the leaves are fresh and new, Poison Ivy is at its most potent.

Here's Poison Ivy in the spring, with fresh reddish leaves just starting to come out.

Poison Ivy in the summer.

A closer look at the leaves. Note that the leaves are sometimes toothed and sometimes smooth-edged.
This plant is growing in a rocky area, a favourite habitat of Poison Ivy. Note the developing white berries. Also note that this plant is growing in a very different form that the one shown in the above two photos. This plant's leaves are droopy, glossy, and fairly smooth-edged. The one above has dull leaves, toothed edges, and aren't drooping.

Cure

Washing with Jewelweed juice is also very effective. Just grab some of the plant, and smush it onto the affected area. The stems are the juiciest. If you do come in contact, you have some time to get the oil off your skin before your body reacts. You must use a detergent to break down the oils. Wash with Dawn dishwasher detergent. Antihistimines are recommended as well, but once the rash occurs, they are of little value.

Once you have the rash, it can go systemic. The body senses a bad enough problem that it releases histimines to many sites. This is where it can get serious. Now you may get blisters popping up where you were never even exposed. The fluid from the blistering is not going to spread the rash, because it is syrum of the body, not poison. It is like any other serious allergic reaction at this point and anaphalactic shock is a possibility.

Once systemic the only treatment that I have found effective is the administration of steroids, such as cortizone. They basically shut down the immune system response, but they have side affects that can last for a while. Since they shut down the immune system, you can be susceptible for some time to disease after taking it. However, if you have ever had systemic poison oak before, you realize that you will do anything to make it go away.

Rubbing alcohol is said to help with the rash.
Poison Sumac
This small tree is very poisonous to touch. Some say that it is much more poisonous than Poison Ivy. For more information on the effects of Poison Sumac, see Poisòn Ivy (above), the effects of contact with Poison Sumac are the same as Poison Ivy. A shrub or small tree, 6-20 feet tall. Compound, with 7-13 pointed, smooth-edged leaflets. The leaflets often angle slightly upwards from the leaf stem. Buds hairless. Stems and Twigs: Hairless. Bark smooth, dark, speckled with dark spots. Berries: Similar to Poison Ivy: spreading or drooping clusters of small white hard berries. Habitat: Grows in wet areas (wet ground or in standing water), in marshes and partly-wooded swamps. For cures, see Poison Ivy

A Poison Sumac tree, about 6-7 feet tall.

This is a photo of the top of a small Poison Sumac shrub. It shows the upward orientation of the leaflets, a distinctive feature.

A view from above of a smaller Poison Sumac shrub showing the leaves.

The leaves turn brilliant red in the fall.

This young Poison Sumac shows how the leaflets often grow at an upward angle.
Water Hemlock

The Water Hemlocks are the most poisonous plants in North America. All parts are deadly poisonous. Even a small mouthful can kill an adult. Therefore it stands to reason that ingesting even a little bit of the juice will make a person seriously ill. So, it is best to learn to identify these plant by sight, rather than characteristics that require you to handle it or examine the roots or inside of the stem. It is so virulently poisonous that it is best to avoid handling it at all. Most poisonings have occurred due to confusion with edible look-alikes.

Please do not rely solely on this web page for identifying these plants. Consult field guides for more detailed information. Do not handle these plants. If you do, thoroughly clean your hands immediately afterwards. Take appropriate steps to avoid accidentally ingesting any part of these plants or their juice.

It is particularly important for wilderness survival enthusiasts to learn this plant, as its stems are hollow and are therefore appear to be ideally suited for use as straws. Don't make use of this plant in this way - many poisonings have occurred in this manner.

Distinctive features: Wet areas. Alternate twice-compound leaves; leaflets sometimes haphazard in arrangement.

Similar species:

- Water Parsnip - very similar, except the leaves are only once-compound
- Cowbane - Also poisonous, and closely resembles Water Parsnip.
- Mock Bishop's Weed
- Bulb-bearing Water Hemlock
- Wild Carrot (Queen Anne's Lace) - but this plant grows in dry areas
- Other members of the Parsley Family.

Height: 3-6 feet tall

Flowers: Small white flowers in a flat or rounded umbel (an umbrella-shaped cluster) 2-5" wide. Individual flowers about 1/8" wide, have 5 petals and 5 stamens.

Leaves: Alternate compound leaves with lance-shaped leaflets, pointed, with numerous teeth. Note the sometimes multiples of leaves giving rise to a somewhat haphazard arrangement of leaves along the leaf stem. Sometimes doubly compound or lobed. Sometimes tinged with red. Up to about 4" long, 1.5" wide. The veins on the leaflets end at the notches between the teeth (this is unusual in plants).
**Stem:** Branching, smooth & stout, often mottled or solid purple. Hollow. Lower part of stem chambered. Roots have fat tuberlike branches.

**Habitat:** Wet open areas such as marshes, along shores, and sometimes open swamps.

**Longevity:** Perennial

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Photo of the stem. Note the purplish tinge. Also note the "glaucous" aspect of the stem - the whitish bloom which is easily wiped off. Note also the fine vertical lines running vertically along the stem.

The stems are hollow. This tempting aspect has led to poisonings of children who find the stems appealing as pea shooters.

Get to know this plant very well in the summer, so you can avoid it in the winter.

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Many mini-clusters of tiny flowers.

A closer view.

Seeds in late fall, early winter.
Bulb-bearing Water Hemlock

Distinctive features: Spindly plant. Leaves narrow and finely divided. Wet areas. Stem hollow.

Similar species:
- Water Hemlock - The leaves are very different.
- Mock Bishop's Weed
- Other members of the Parsley Family.

Height: 3-7 feet tall

Flowers: Sparse, white, in an umbel (an umbrella-shaped cluster) about 1-2" wide. Individual flowers about 1/8" wide, with 5 petals and 5 stamens.

Leaves: Widely spaced alternate compound leaves have very narrow leaflets. Leaflets up to 3" long. Widely spaced ragged teeth. Tiny bulblets occur in the axils (where a leaflet joins the stem).


Habitat: Wet open areas such as marshes, along shores, and sometimes open swamps

Longevity: Perennial

Comments: DEADLY POISONOUS

The leaves of this plant are very different from "regular" Water Hemlock. A close view of a leaf.

This photo shows the bulbs that grow along the stems. They are not always visible.
The flowers seem to be a bit sparser than those of regular Water Hemlock.