

# Horticulture

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## Native West Virginia Foods for Backyard Gardeners

### Introduction

Before you bite into those luscious, red raspberries, do you know where they came from? Not which plant, store, or country, but where their roots began. Every plant we consume can trace its origins to the wild.

For thousands of years, humans have relied on wild foods to survive. Through trial and error, we have learned which plants are safe to consume and taste good too. Native Americans were the first to use and cultivate wild plants in our part of the world. They can be credited with taming peppers, squash, pumpkins, corn, tomatoes, potatoes, and beans, along with many varieties of fruits.

In our quest to develop the perfect fruit or vegetable, we have lost our reliance on, and knowledge of, edible wild plants. Since supermarkets provide every type of produce we could want, we rarely look to our backyards or woods to hunt and gather food. Why not try cultivating some of our native foods in your own garden? You might just discover that "wild" can be "wonderful"!

### Tips for Gathering and Growing Native Foods

The most important thing to remember when gathering or growing wild foods is proper identification. West Virginia has many species of plants, and many of them look alike. Because some species are poisonous, it is best to use a guide such as *A Field Guide to Edible Wild Plants: Eastern and Central North America* (Peterson Field Guides (R), by Lee Allen Peterson).

When gathering, you may need gloves, tools, and baskets to harvest and transport your foods. Depending on what and where you are gathering, protective clothing and insect repellent may come in handy to prevent scratches and bites. Beware of poison ivy!

Never collect plants from areas that may have been sprayed with pesticides. This may include your lawn, a field, power line right-of-way, or roadside. Keep in mind that state and national parks are off limits for collecting, and permits may be required on national forest lands.

When choosing native plants for your yard, check the scientific name to make sure you have the right species and select plants that will grow in your planting zone. Many greenhouses, garden centers, and gardening catalogues are good sources. Consider your soil, amount of annual precipitation, and amount of sunlight in your backyard to determine which plants will thrive.

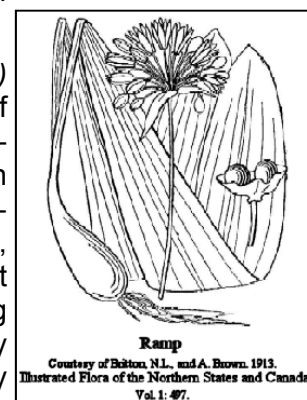
### Favorite Foods of Our Ancestors

Following is a list of plants that are native to West Virginia. Some of them are excellent for landscaping and for attracting wildlife as well as for human consumption. Also, many edible plants introduced from Europe thrive in West Virginia.

### Herbs and Greens

After long winters without fresh vegetables, Native Americans and early pioneers sought out spring greens to use as tonics to purify the blood. They are good sources of vitamin A.

**Ramps** (*Allium tricoccum*) or wild leeks are some of the most popular and well-known spring herbs in West Virginia. As members of the onion family, they give off a pungent aroma and have a strong flavor. Highly prized by many, ramps are relatively



easy to grow. They prefer cool, shady areas with damp, rich soil high in organic matter. Ramp bulbs may be transplanted to your garden, or seeds can be collected from the wild and planted in the fall. Over time they will spread, creating a fine patch for you to harvest and enjoy in March and April. Numerous recipes are available, but most folks like to fry them in bacon grease and eat them with ham, brown beans, and corn bread.

**Wild Onions and Garlic** (*Allium spp.*) can add flavor to your favorite dishes. However, they are more potent than domestic varieties. Use them sparingly in salads or in cooked dishes.

**Pokeweed** (*Phytolacca americana*) is a robust, perennial pot herb widely used in Appalachia at one time. Most people consider it a nasty weed. Only freshly cut, young leaves and shoots are edible. All parts of the mature plant (roots, stems, and berries) are poisonous. To prepare new shoots, boil them twice, discarding the first water. Serve like spinach.

**Cinnamon and Bracken Ferns** (*Osmunda cinnamomea* and *Pteridium aquilinum*) are not only good landscaping plants, but they also provide food for wildlife and humans. Young “fiddleheads” shoot up in early spring and should be collected before they unfurl. They can be boiled, fried, or sautéed. They have a mild, nutty, asparagus-like flavor.

**Prickly Pear Cactus** (*Opuntia humifusa*) is more common in deserts of the American Southwest, but it also grows on dry shale barrens in eastern West Virginia. While the spines may scare some away, this plant has beautiful yellow flowers in the spring and tasty green stems and fruit. The tender leaves (pads) should be skinned and all spines removed. They can then be diced and used in salads or stews.

### Starchy Vegetable Substitutes

Many wild plants produce tubers that serve as substitutes for potatoes. They contain starches and are good sources of potassium and vitamins.

**Arrow Leaf** (*Sagittaria latifolia*) - also known as arrowhead, duck potato, and Indian potato - was a favorite potato substitute of Native Americans. The plant, which grows in shallow ponds and wetlands, has rhizomes that produce edible tubers. The tubers can be harvested in October and November by raking the mud. Tubers should be peeled and boiled like potatoes for 20 to 25 minutes. This plant also adds character to a backyard pond because of its arrow-shaped leaves and white flowers.

### **Jerusalem Artichoke**

(*Helianthus tuberosus*) is a member of the sunflower family. The name is believed to have arisen from the fact that their roots taste somewhat like artichokes and the Italian word for sunflower is “girasole.” Hence the corruption of the word and origination of the name we know today. Native Americans introduced them as sunroots to the pilgrims. They are commonly marketed today as

“sunchokes.” With their bright yellow sunflowers and healthy tubers, they are a favorite with gardeners and cooks. They can be eaten raw, in stir-fry dishes, or cooked like potatoes.

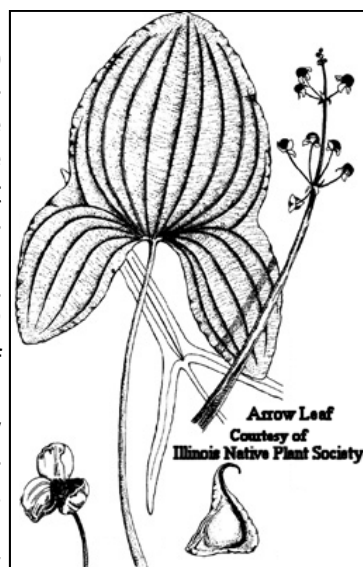
**Cattails** (*Typha gracilis*) have many uses and can be harvested throughout the growing season for food. In early spring, the young shoots can be gathered, peeled, and eaten raw or boiled. In mid-summer, the flowers or “cattails” can be roasted and eaten like corn on the cob. The roots can be collected, peeled, and boiled like a vegetable. The plant is also useful for making woven baskets and as food and cover for aquatic wildlife. It makes a good pond edge plant; however, it has invasive properties.

### Fresh Fruits

Many backyard gardeners currently enjoy the benefits of raising cultivated grapes (*Vitis spp.*), apples (*Malus spp.*), blueberries (*Vaccinium spp.*), cranberries (*Vaccinium spp.*), raspberries (*Rubus spp.*), blackberries (*Rubus spp.*), and strawberries (*Fragaria spp.*). Their wild cousins can be grown, but the fruit tends to be smaller, seedier, sometimes sweeter, and sometimes more tart. Here are a few lesser known and used native wild fruits.

**Flowering Raspberry** (*Rubus odoratus*), a member of the rose family, has rose-lavendar flowers and reddish purple berries. It is an excellent thornless shrub for landscaping. Its fruit, whose flavor varies, can be eaten like other raspberries.

**Elderberry** (*Sambucus canadensis*) is a fast-growing shrub or small tree that produces an umbel of white flowers in the summer. The flowers give rise to small reddish berries that turn black when ripe. The berries can be used in jelly and wine, but most people consider them bitter when eaten raw.

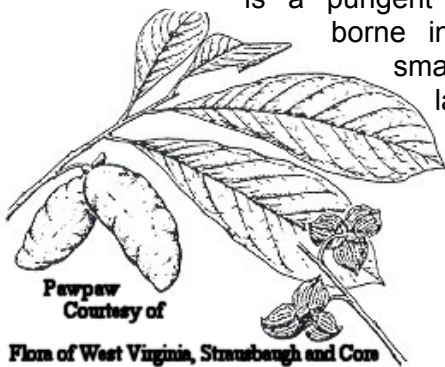


**Red Mulberry** (*Morus rubra*) is a small tree that produces blackberry-like fruit known as syncarps. The fruit can be eaten raw or made into jelly or pie. It is a favorite of birds and other wildlife. Because the tree tends to be messy when it drops fruit, it is best planted away from homes and driveways.

**Serviceberry** (*Amelanchier laevis*, and *Amelanchier arborea*) also known as shadbush and Juneberry. It is an understory shrub or tree that produces white flowers in early spring and dark purple berries in the summer. Its various names can be traced to the time of year when (1) circuit riding preachers were able to have church services after long winters; (2) shad runs occur in the eastern United States; and (3) the plants berries ripen. The berries can be used in jellies, jams, and pies or eaten fresh from the tree.

**Persimmon** (*Diospyrus virginiana*) is one of the most flavorful fruits in the wild. The slow-growing tree produces small yellow to orange fruit that ripens in the fall. Fruit that does not fall easily from the tree is not ripe and will make your mouth pucker! There are many cultivated American and Asian varieties. The fruit can be eaten raw, made into jellies, jams, cookies, and cakes, or fermented with corn meal into "persimmon beer." It's also a favorite food of wildlife.

**Pawpaw** (*Asimina triloba*), or poor man's banana, is a pungent and tasty fruit, borne in clusters on a small tree. It is the largest edible fruit native to North America and the only temperate member of a tropical family. The fruit resembles a mango in



shape and smells and tastes somewhat like a mango or banana. It can be eaten raw or prepared in a variety of ways. Many gourmet chefs use pawpaw in dishes, and the tree has been widely propagated.

## Nuts

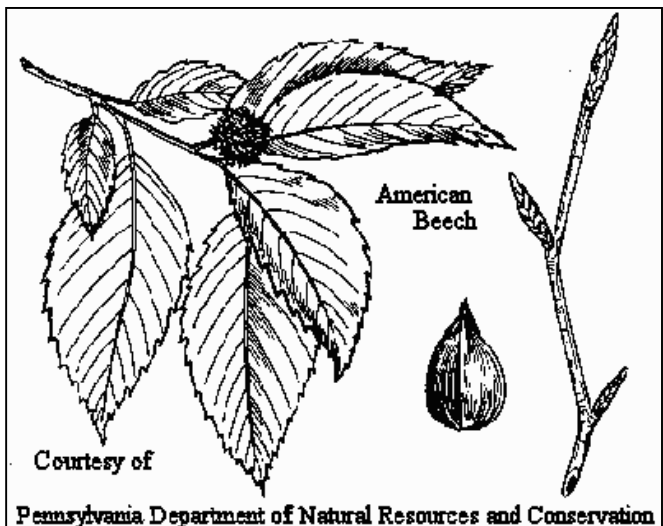
The deciduous forests of the eastern United States have many species of nut-bearing trees. Some of these nuts are edible right off of the tree, but others must be prepared before they can be eaten.

**Acorns** (*Quercus spp.*) are nuts produced by oak trees. White oak (*Quercus alba*) acorns are the favored nut. Native Americans used acorns as a type of flour. Since acorns contain high levels of tannins that make them bitter, they must be boiled in two waters before they are shelled, dried, and ground into flour. The acorn flour can be used alone or mixed with wheat flour or cornmeal to make muffins and bread.

**Walnuts** are common trees in West Virginia, and two species are present, black (*Juglans nigra*) and white (*Juglans cinerea*). Black walnuts are prized trees for their high-quality lumber and "chees-y" - flavored nuts. White walnuts or "butternuts" are oilier and sweeter than black walnuts. Walnuts contain an omega-3 fatty acid and heart-healthy sterols. Walnuts can be eaten straight from the shell or baked in cakes, cookies, and other desserts.

**Hickory Nuts** are the fruit of hickory trees. Pecans and walnuts are cousins of the hickory. Five hickory species are found in West Virginia: shagbark (*Carya ovata*), shellbark (*Carya laciniosa*), pignut (*Carya glabra*), mockernut (*Carya tomentosa*), and bitternut (*Carya cordiformis*). Shellbark - which has the largest nuts - shagbark, and mockernut hickories produce the most flavorful nuts. Nuts of the pignut and bitternut hickories tend to be too bitter for humans but are consumed by wildlife. Hickory nuts can be eaten from the shell or used in any dish containing nuts.

**Beechnuts** (*Fagus grandifolia*) are the fruit of the beech tree. These three-dimensional, triangular-shaped nuts are difficult to open but very flavorful. The beech tree is slow growing and becomes very large over time. Therefore, it is best grown on the edge of yards or woods. Beechnuts are best enjoyed straight from the tree in the fall.



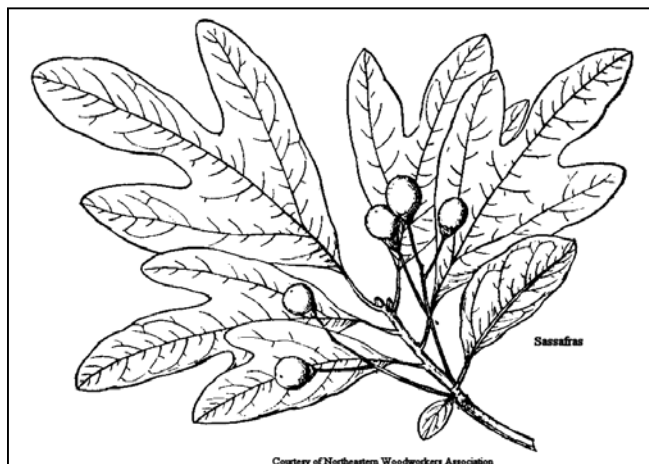
**Hazelnut** (*Corylus americana*) is the fruit of small, American hazelnut shrubs. Not to be confused with witch hazel (*Hamamelis virginiana*), hazelnuts are smaller in size than the European varieties available in grocery stores and gourmet food shops. The shrub is also a favorite food of wildlife.

## **Drinks**

Since coffee and tea plants are not native to North America, they were not known or used by Native Americans and early pioneers. As a result, many plants and trees were boiled to produce tea substitutes. Roots of the sassafras (*Sassafras albidum*) tree can be boiled to make a rootbeer-tasting red tea. Twigs of black birch (*Betula lenta*), when boiled, make a spearmint-tasting tea. The red berries of smooth (*Rhus glabra*) and staghorn (*Rhus typhina*) sumac can be boiled and strained to make a hot tea or cold drink. New Jersey tea (*Ceanothus americanus*), also known as red root or snowball, was commonly used by Native Americans to treat illnesses. Violets (*Viola spp.*) are a versatile plant whose leaves can be used in salads or boiled as a tea substitute.

## **Sweet Treats**

One thing Native Americans and early pioneers lacked was a product to sweeten their foods. The solution was found in the maple tree. Maple sap was first processed by American Indians to make syrup and sugar. The sap of the sugar maple (*Acer saccharum*) is the most favored, but sap from red (*Acer rubrum*) and silver (*Acer saccharinum*) maples can also be used. Since it takes about 40 gallons of sap to make one gallon of syrup, the process of making maple syrup is rather long. Over time, methods have been developed to shorten the process of collection and evaporation. Maple syrup can be used on pancakes and in many dishes as a sugar substitute. The sugar maple also provides excellent shade and beautiful color in the autumn landscape.



Now that you know more about the foods of our ancestors, why not bring back a piece of history? Try planting a few of these native foods in your garden for yourself or your forest friends. The woods are just waiting to be discovered. The best part is - you can take them home with you.

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