



The Leaflet



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Forests to Table: Wild Edibles

By: Ellen Sulser, Volunteer Coordinator, Forest ReLeaf of Missouri

In recent years, restaurants, and foodies across the country have taken the idea of eating local by embracing the idea of “farm to table” eating. This eating effort is focused on connecting kitchens and locally grown seasonal crops to maximize nutritional value, lessen environmental costs, and support communities. But why limit yourself to what grows on a farm and is cooked in a restaurant? Missourians can also look to the woods for inspiration on what to eat.

Whether intentionally planted or found in the wild, trees and forest are filled with possibilities for snacking. The darlings of foraging, from pawpaw to morel mushrooms to serviceberry are well-known and sought after. In a healthy forest, edibles of established and successional species would exist in a seasonally shifting blend of berry, fruit, mushrooms, and nuts. Our foodscapes, however, are subject to many of the same threats as the broader ecosystem: namely invasive species.

The influx of escaped nonnative ornamentals and invasive species into our landscape has threatened not only our forest’s biodiversity, but also changed the face of wild edible food sources. Native berries like spicebush and serviceberry are out-competed by Japanese honeysuckle. The dense mats of roots formed by non-native stilt grass and garlic mustard prevent the growth of edible forbs like plantain and watercress. In many cases these nonnative plants are further spread by native wildlife’s preference for eating the berries, but avoiding the leaves. Removing fruit laden branches and hand pulling vegetation can help contain established plant pop-

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Native Edibles



Persimmon

The common persimmon (*Diospyros virginiana*) is easily recognizable by its fantastic foliage, its flavorful fruit, and its blocky bark. Despite the name, the common persimmon is actually quite extraordinary! It is among the few trees that can grow in nearly any type of soil, and it boasts a wood that is both extremely strong and dense. Fruit ripens slowly to a recognizable orange throughout the late summer and fall. The town of Sparta celebrates this tree with a Persimmon days festival in October.

Dryad Saddle

Commonly found growing on dead hardwood trees throughout Missouri forests, Dryad Saddle is a large, yellowish-tan bracket fungus with a short stalk that carries a smell like watermelon rind. It's considered a good edible, especially when the mushroom is young. If you find the dryad's saddle, you can cut off the tender edges, slice them into small pieces, and cook them in butter. Drain and pat dry, then make a sugar syrup and pour evenly over them and refrigerate. The result tastes like watermelon candy.



Elderberry

Elderberry (*Sambucus canadensis*) bushes are common statewide and can be found along roadsides or streams, in open woods, or hidden in fence rows or thickets.

The berries become purple and ripe in August and September and have a recognizably bitter taste. Their use in wine, juice, jelly, jam, syrup, colorant and dietary supplement products is on the rise.



Wild Edibles (continued)

ulations from reaching new territories. Similarly, foraging edible wild invasive plants is a control method that can allow native plants to reestablish. While foraging wild invasive plants for consumption will not remove established populations, it does make the task of invasive control within your own property slightly more enjoyable by giving you a treat out of an otherwise thankless task.

Before setting off into the forest, make sure you know how to correctly identify the species you're looking for. Many berries can be easily confused, and some can have negative effects on human health. Unless you're 100% certain, err on the side of caution with what you consume. Similarly, it's important to know your foraging site. While it's tempting to collect from your own backyard, take a minute to think about land management practices undergone in the last few months. Do not harvest plants in areas that are likely to have undergone chemical treatment and make sure to thoroughly cleanse anything you pick before consumption, especially if it's along a waterway.

If you can't beat them eat them. Autumn olive is a deciduous shrub with silvery leaves that was planted widely throughout the U.S. for erosion control near roads and along ridges. It's notable for red berries with silver flecks that weigh down branches from summer to fall. It spreads quickly, out-competing local shrubs for resources and changing the surrounding soil chemistry in a process called allelopathy. Once it takes root, it is a prolific seed producer, creating 200,000 seeds from a single plant each year. Through fruit, birds will spread these seeds far and wide throughout pastures, along roadsides and near fences. By removing branches laden with fruit before birds can begin redistribution, we can prevent seeds from reaching new territories and earn ourselves a new ingredient.

Autumn olive is tart like red currants and can be used in similar ways- popped into oatmeal for flavor or baked into a dessert. Their high lycopene content can cause separation in jams and jellies, but their color and flavor make for sweet and savory sauces and fruit leathers. After the first frost, they tend to become sweeter in flavor. The berries contain a small pit. While they are not harmful to eat, they are not quite small enough to be comfortable experience, so make sure to strain them out before incorporating the fruit into recipes.

Autumn Olive Tart

1 tart or pie crust of your choice, rolled out
2 cups of fruit pulp
1/2-1 cup sugar
to taste, location and timing of berries can influence their flavor
3 tbsp. flour

- Preheat oven to 400°F. In a tart or pie pan, pre-bake the crust until golden brown, about 12 minutes.
- Wash the collected autumn olive berries and then press them through a strainer or colander to collect fruit pulp.
- Mix in sugar to taste. Add the flour, which will thicken the puree. Pour the berry puree over the crust.
- Bake until puree bubbles in the center, about 10 min, cool, serve.

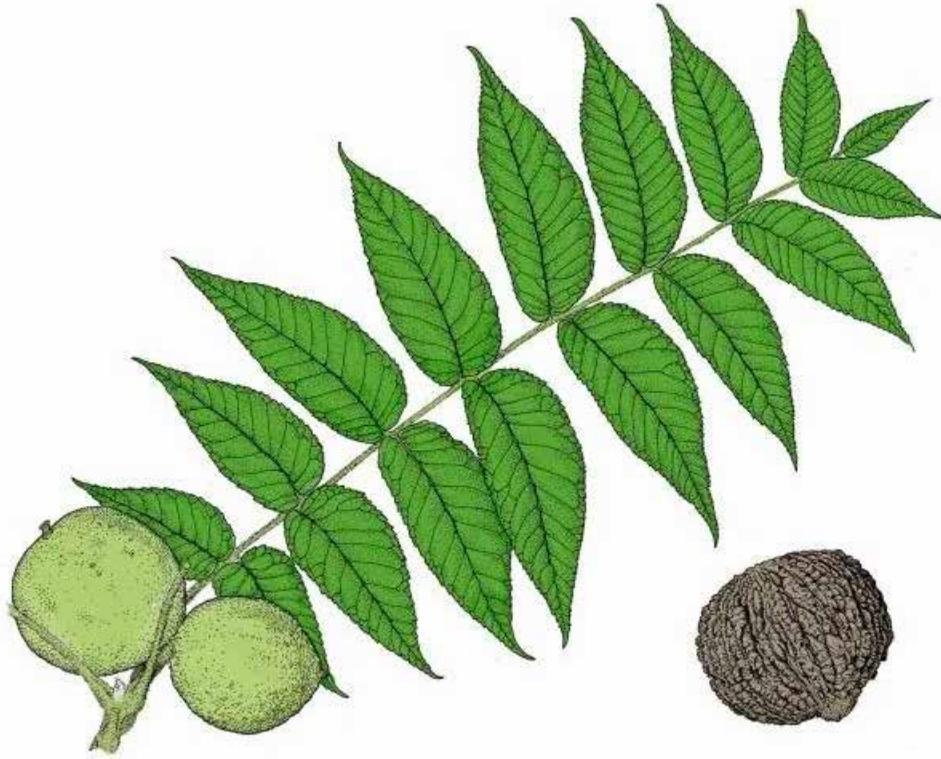
While unassuming at first glance, garlic mustard is a source of frustration for land managers. Garlic mustard was first introduced as a garden herb but escaped and has been causing problems ever since. According to the Missouri Invasive Plants Council, "Garlic mustard can dominate forest understories, forming single-species stands and producing large amounts of seed, which remains viable for years." Part of its spread is due to a lack of grazing by deer who prefer native understory plants. Edible in its entirety, the plant offers second-year roots tasting like horseradish and leaves that are a savory blend of mustard and garlic. Garlic mustard is tastiest when harvested young and easily harvested throughout the spring.

Garlic Mustard Pesto

2 cups garlic mustard leaves
1/4 cup walnuts
2 cloves garlic
1/2 cup olive oil
1/2 cup pecorino, grated

- Combine leaves, nuts and garlic in food processor.
- Slowly pour in oil, blending until smooth before incorporating the cheese with pulses.
- Serve over pasta for a tasty treat!

Collection of nuts, berries, fruits, edible greens, and mushrooms for personal consumption is allowed on most MDC areas. Restrictions apply to nature centers and conservation headquarters so check before you collect. Wild edibles typically have a short storage life, so collect only what you can consume and leave the rest. If you're looking to preserve your haul or cook it into an impressive dish, check out the recipe portal on the MDC conservation and education website. In addition to links to their YouTube page and time tested recipes, they also have a digital archive of Jan Phillips' award winning ID guide and recipe collection, "Wild Edibles of Missouri" available for more inspiration. Happy foraging- let us know how your wild recipes turn out at info@moreleaf.org



Featured Species

Black Walnut

Juglans nigra

Among fruit and shade bearing trees, black walnut, *Juglans nigra* is distinct for its value as a part of the ecosystem, being desired lumber, and as a contributor to the food pantry.

Its leaves are pinnately compound with an even number of leaflets on the end and a distinct odor all their own. If you're willing to do the work of cracking the outer shell, walnut fruit's meat is delicious either eaten raw or added to baked goods. One should harvest the seeds quickly as possible to avoid competition from other wildlife and remove the husks quickly before allowing them to dry for a week or two. You can open the shell with a knife, step on it, or if you're feeling particularly confident, try opening them with just your bare hands. If nothing works immediately, don't be too disappointed, after all, these were the same nuts the nutcracker was designed to crack.

While the nuts are delicious, for many, the real value of the walnut lies not in its shade, but in its timber. When surrounded by other trees in the forest, black walnuts grow straight and tall with few, if any, lower branches, which makes the tree ideal for harvest. The easily worked, close-grained wood of the black walnut has long been prized by woodworkers for its attractive color and exceptional durability. Whether used in cabinetry or as stock for rifles, it is the most prized lumber in the state of Missouri, with the highest price per board foot.

Did you know? Multiple organizations in Missouri focus on the growth and promotion of walnuts. Check out the Missouri Nutgrower's association and the Missouri Walnut Council for more information

Source: Ellen Sulser and Dan Billman, *Forest ReLeaf of Missouri*

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Q: Why doesn't grass grow under black walnut trees?

A: Members of the Family Juglandaceae (Walnut Family), including pecan, butternut, and hickory trees produce and release a chemical called juglone to defend their growing space from encroachment by other plants. Black walnut is reported to have the most, or at least, most effective juglone.

With this defense mechanism, called allelopathy, the tree adversely affects many other (but not all) plants. Juglone can be found in all parts of the black walnut tree. If the roots of another plant come within 1/2 inch of the walnuts roots, they can absorb the juglone and sicken and die.

If you are looking for something to plant, try sedges and ferns which are generally resistant to the effects of juglone.

(Source: wildflower.org)

FOREST BULLETIN

Seed to Seedling

*By: Ellen Sulser, Volunteer Coordinator,
Forest ReLeaf of Missouri*

Each year, the staff at George O'White State Nursery grow thousands of seedlings for reforestation, windbreaks, erosion control and wildlife habitat. Many Forestkeeper members are recipients of these very plants, or have used them in community or private planting projects as they work to improve the environment around them. The Missouri Department of Conservation reports that the nursery processes more than 10,000 orders and ships about 2 million seedlings annually. This growth of native plants is made possible through seed gathering from collectors from all over the state. Seed is bought at select times from July to January at the Kirksville, St Josephine and Chillicothe offices, as well as at the State Nursery in Licking Missouri.

The Missouri Department of Conservation orchestrates statewide seed collection with the goal of diversifying the seed source. Such diversification allows the nursery to grow seedlings that will be well adapted to grow into mature trees throughout the state. As MDC Nursery Supervisor Mike Fiaoni says, "The more we can collect seed, the better for our nursery".

Some pointers for collecting:

- Always call first to see if the seeds you plan to collect are still needed.
- Collect only seeds and fruit – no leaves, sticks, or trash.
- Keep species separate – if you're not certain that two (or more) trees are the same species, keep them in separate containers.
- Most species are ripe and ready to collect when they fall off the tree
- Keep the seeds/fruit cool until you can deliver it- an air-conditioned basement is good for a short period of time.

Prices per pound and desired species varies so interested members should be sure to call ahead and confirm before collecting. A full list of desired seed species and their prices is available upon request by calling (573) 674-3229.



Take a Hike!



Acreage: 12,413

County: Taney

Owner: U.S. Forest Service

Region: Southwest

Established: 1976

Address: Kissee Mills, MO 65680

Directions: :

The Hercules Tower Trailhead

Travel south on Highway 125 for 9.3 miles, The site will be on your right.

The Blair Ridge Trailhead

Travel 9.5 miles south on Highway 125. Turn right onto Forest Road 155 and travel approximately 2 miles.

The Coy Bald Trailhead

Travel on Highway 160 east for 9 miles. Turn left onto Forest Road 566 and travel for approximately 4 miles.

Hercules Glen Wilderness Area

The trails less traveled

The first Wilderness area created in Missouri, the Hercules Glade Wilderness covers 12,315 acres in Tancy County and is a mix of open grassland, forested knobs, steep rocky hillsides, and desert-like limestone glade systems. Here, visitors can find species more commonly associated with the Southwest like the prickly pear cactus, road runners, and collared lizards.

Eastern red cedar and oak trees are interspersed with open glades supporting native tall prairie grasses. Redbud and dogwood provide beautiful spring flowers, while smoketree and maple put on vivid fall color displays.

While the landscape offers over 32 miles of looped trails to explore, Long Creek is the most frequently used trail, due in part to the attraction of its seasonal falls and wildflowers. The trail parallels the running water in late winter and spring as snow melt joins its flow. Many trails can be combined to create short loops or longer hikes, depending on the user's desire.

As a wilderness area, trails are open to foot and horse traffic, but not motor vehicle or bicycle use. Trail conditions lean towards ruggedness and cellular reception can be unreliable, so make sure to bring a printed map, plenty of water, and share your hiking plan with friends or family before your trip.

Featured Events

Prescribed Burn Workshop: Prescribed Burn Demonstration Field Day

Date: Saturday, September 17, 2022 9:00am - 12:30pm

RSVP: mdc.mo.gov/events

Location: Wah'Kon-Tah Prairie, El Dorado Springs, MO

Prescribed burning can be a valuable tool for managing native plant diversity and controlling undesirable vegetation when it is properly applied. This workshop will provide basic information about how to execute a prescribed burn for grassland management. Upon registration, participants will be given a link to a mandatory online portion of the course. Please bring your certificate of completion to the demonstration burn. We will be conducting a prescribed burn so dress accordingly with leather boots, leather gloves, cotton pants, cotton long sleeve shirt, and safety glasses. Participants will learn about burn equipment, burn line installation, safe weather parameters, ignition operations, and other techniques to safely conduct a prescribed burn.



Arbormeisters Homebrew + Craft Beer Festival

Date: Saturday, September 24, 2022, 4:00 - 7:00pm

RSVP: moreleaf.org/events

Location: Forest ReLeaf's Nursery, Creve Coeur Park, Maryland Heights, MO

Forest ReLeaf is excited to present Arbormeisters! Each homebrew includes at least one ingredient sourced from a tree! Enjoy these unique brews while taking in the natural beauty of Forest ReLeaf's nursery and arboretum in Creve Coeur Park. All proceeds benefit Forest ReLeaf's mission of "Planting Trees, Enriching Communities." Attendees will have the opportunity to rate the various brews and vote for their favorites; may the best homebrewer win! You will enjoy music, nursery tours, raffle prizes, food, and more. Tickets are \$35, \$55 for VIP and includes a tasting glass, snacks, water, and unlimited sampling. Don't wait to purchase – tickets are limited!

Tree Delivery to Kansas City and Joplin

If you're looking at planting trees on public or nonprofit lands this fall, free trees ordered through Project CommuniTree at Forest ReLeaf of Missouri will become available for regional pickup in Kansas City and Joplin on the 4th and 6th of October.

Curious if your project would qualify? Learn more about program eligibility at forestreleaf.org/plant/project-communitree or email info@moreleaf.org

Welcome Members!

Stevie Aponte
Kelsey Baker
Nichole Carder
Jeremiah Coomes
Vincent Cruz
Tia Garrott
Vicki Jurica
Rebecca Keen
Kevin Kenefick
Jensen Knutdson
Fred Lamar
Teagan LeVar
Craig Matzenbacher
Casey McNellis
Jo Pang
Michael Rich
Nicholas Rogers
Tamara Serr
Fred Weisenborn

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Annual Forestkeepers Summit: Celebration of the White Oak

Save the date for the annual Forestkeepers Summit in Columbia on **Saturday, August 27th from 9:00 am - 3:00 pm**. Join us as we discuss the ways in which white oak supports our local forests and economies.

The event features a workshop on the identification of *quercus alba*, common health issues, and the role they play in wildlife and forest dynamics. A guest lecture from the White Oak Initiative will talk about the economic and social benefits of white oak. We'll top off the day with a field trip to learn about white oak's use in aging spirits and whiskey production and presentation of the Annual Forestkeeper awards.

Schedule:

- 9:00 am - Meet at Finger Lakes State Park
- 9:30 am - Bus departs for Hungry Mother Park
- 10:00 am - Walking tree observation
- 11:00 am - Bus departs
- 11:30 am - Tour oaks in cooperage
- 12:30 pm - Awards, lunch, and educational program
- 3:00 pm - Return to Finger Lakes State Park

RSVP by emailing ellen@moreleaf.org or visit forestkeepers.org/forestkeepersconference