



# *Edible Native Plants for Urban Landscaping*

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Native Plants and More

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Photos by Randy Tindall

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# Edible Native Plants grown as crops

- Sunflower
- Elderberry
- Cranberry
- Pecan
- Paw paw
- Hazelnut
- Walnut
- Persimmon

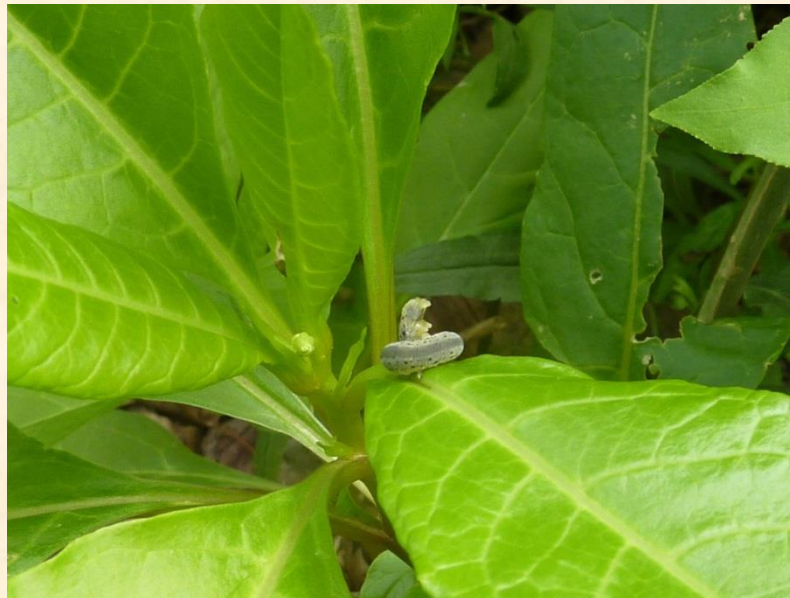
# Native edible plants

## Leaves and Stems

Wild onion  
Wild leek  
Common milkweed  
Wood sorrel  
Cattail  
Goldenglow  
plant

## Fruits and seeds

Hog peanut  
Ground plum  
Wild strawberry  
Prickly pear  
Passion fruit  
Persimmon  
Aronia/chokeberry



## Flowers

Common milkweed  
Elderberry  
Violets  
Red bud  
Bee balm  
Passion fruit

## Roots and subterranean stems

Ground nut  
Jerusalem artichoke  
Lotus  
Prairie turnip  
Arrowhead

# Short list of edible native plants

Wild strawberry  
*Fragaria virginiana*





# Wild ginger (*Asarum canadense*)



# Wild Leek 'Ramps'

*Allium tricoccum* and *A. burdickii*)

Most abundant is *A. tricoccum* with  
broader leaves



04 11 2015



It propagates from  
seed and bulb division



# Bulbs and leaves are edible

*To protect populations, only leaves should be harvested*



It is possible to grow it in raised beds in Missouri under 30-40% shade in woodlands (raised bed mix from the St. Louis compost company)





## Fall, glade or prairie onion *Allium stellatum*:

Flower provides forage for bees, beetles  
and wasps



© Randy Tindall / Nadia's Backyard

Glade onion can be grown in raised beds with prairie tea (an annual host plant for goatweed butterfly)



# Propagated from seed or by bulb division



# Flowers used to flavor garnish foods



*Rudbeckia laciniata*

Goldenglow or socham

Consumed as a green  
In the spring

Shade-moist soil



# Gathering goldenglow leaves in the spring (May 14)



# Cup plant (*Silphium perfoliatum*)

Sun to moderate shade

Dry to moist soils



Basal leaves are harvested in early spring



Cup plant and goldenglow leaves are blanched for 5 minutes before used in recipes calling for spinach



# Jerusalem artichoke Or sunflower artichoke –sunchoke *Helianthus tuberosus*

Plant in Jan – June

Harvest Oct – March



Low starch tubers CHO (Inulin)



Propagation is easy by planting the rhizomes



# Seed consumed by birds in the fall



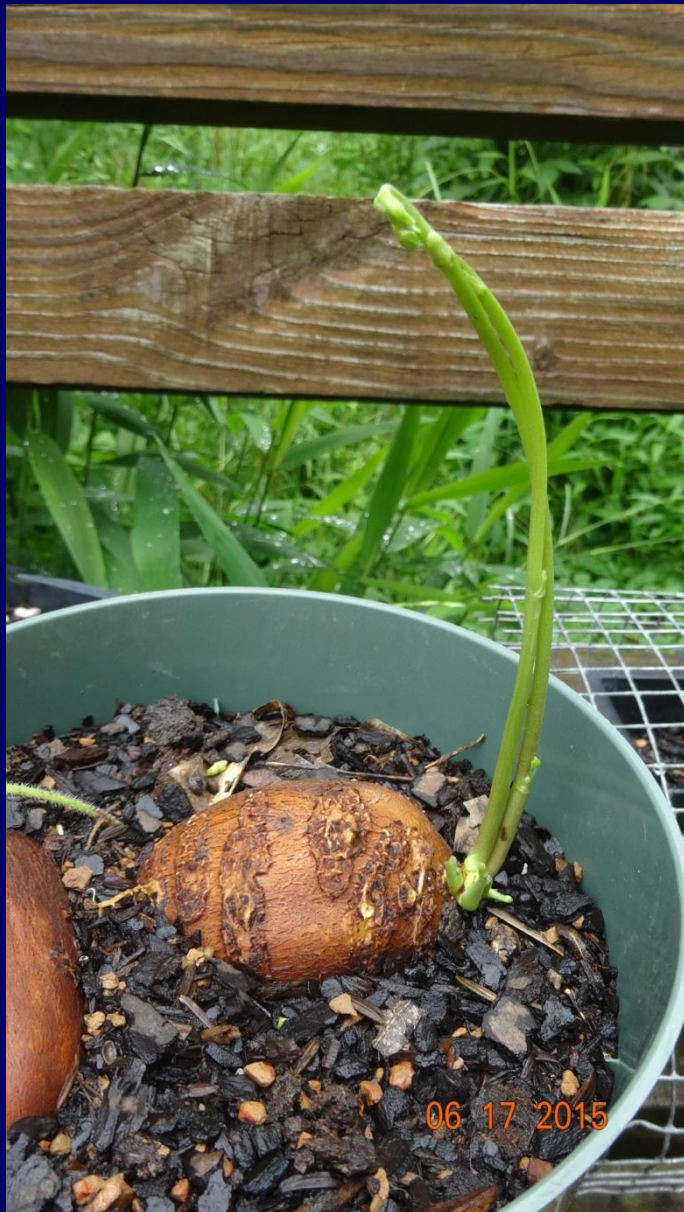
*Apios americana*  
Ground nut

Edible tubers and seeds  
Tubers gathered in the fall

Grows in wet meadows, prairies or  
woodlands

Shade tolerant





Propagated from seed  
or tubers in the early  
spring (Source: Kindscher 1992)

Use in recipes calling for potatoes



Purple poppy mallow  
*Callirhoe involucrata*

Root and leaves edible



# Leadplant *Amorpha canescens*

Seed: \$7/ounce or \$2.50 packet



# Leadplant *tea prepared with leaves*



Mountain mint, leadplant and sumac teas

# Wild Bergamot (*Monarda fistulosa*)

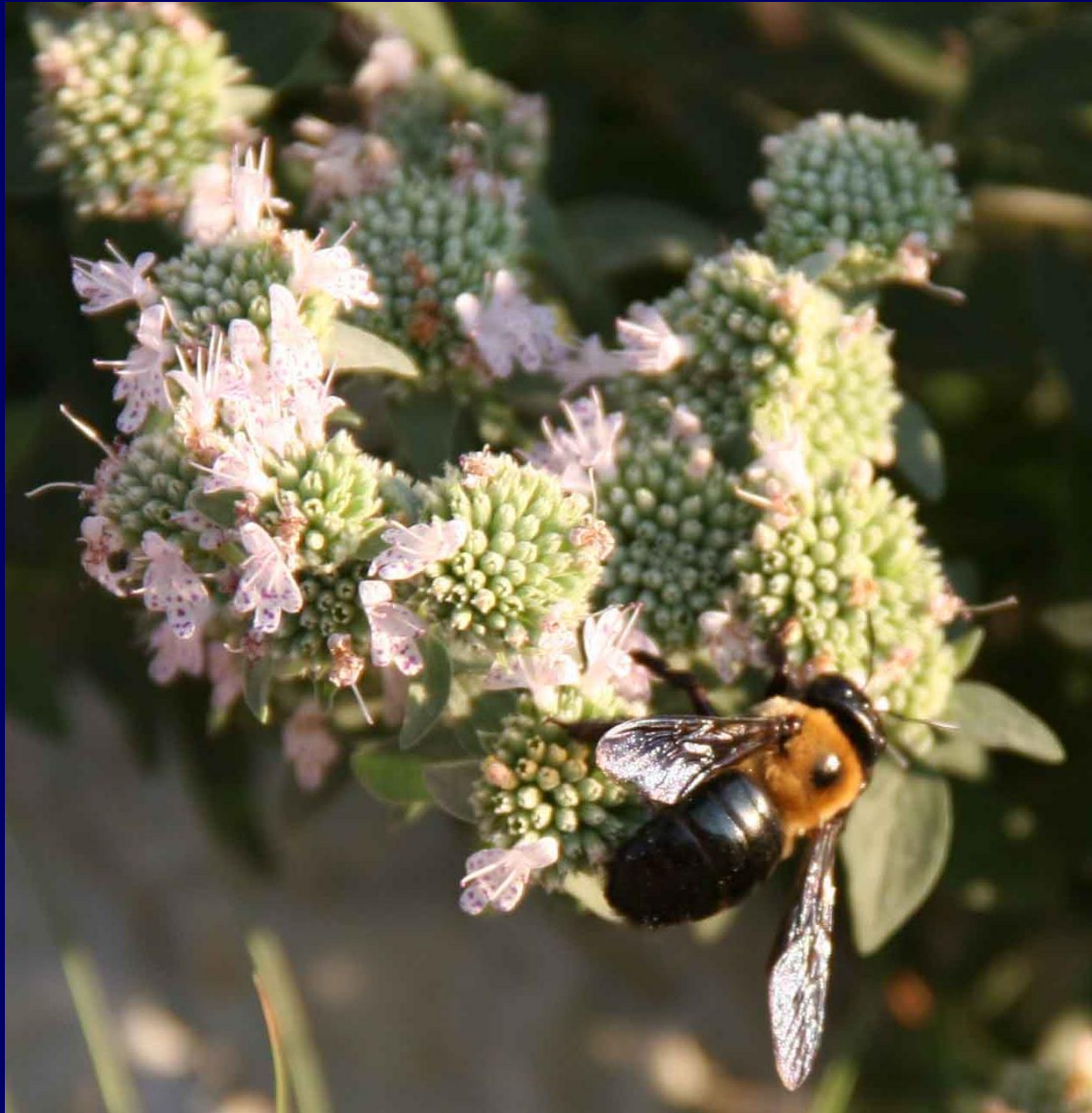
Leaves for tea/Earl Gray Tea flavoring



# Hairy Mountain Mint

*Pycnanthemum pilosum*

Seed \$ 30/ounce



# Dittany (*Cunila origanoides*)

Herb to replace oregano



# Dry site under shade for dittany



# Calamint (*Calamintha arvensana*)

## Herb for tea



Propagated from seed



# Calamint *Calamintha arvensana*

Full sun-  
Summer-Fall blooming



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# Urticaceae



## Stinging nettle, tall nettle

(*Urtica dioica*)

Leaves collected in spring or fall  
consumed as greens.

Leaves opposite



## Stinging nettle, wood nettle

(*Laportea canadensis*)

Greens consumed in early spring.

Leaves alternate

# Nettle habitat





*Prunus americana*  
American wild plum

*Used for nesting by many songbirds*  
*Food for quail, birds, and small mammals*



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# Wild plum jam with dittany crackers



# Elderberry (*Sambucus canadensis*)

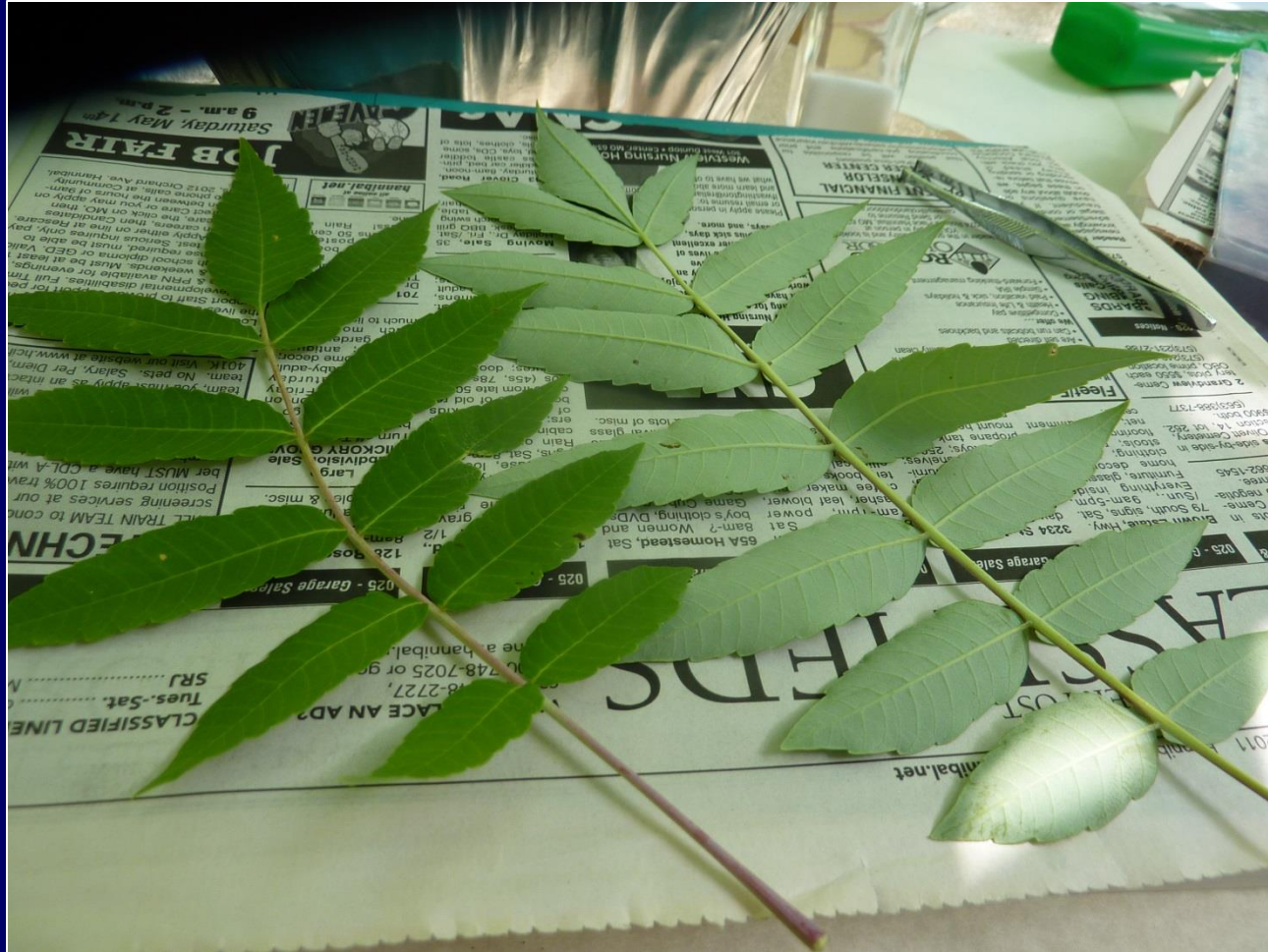
Flowers and berries edible



# Easily propagated from seed and cuttings



# Smooth sumac *Rhus glabra*



*Winged sumac R. copallina*



Randy Tindall © 2012

For a refreshing drink, syrups and jellies



Spicebush  
*Lindera benzoin*

Spicebush  
swallowtail  
caterpillar





## *Fruits, twigs and leaves are edible*

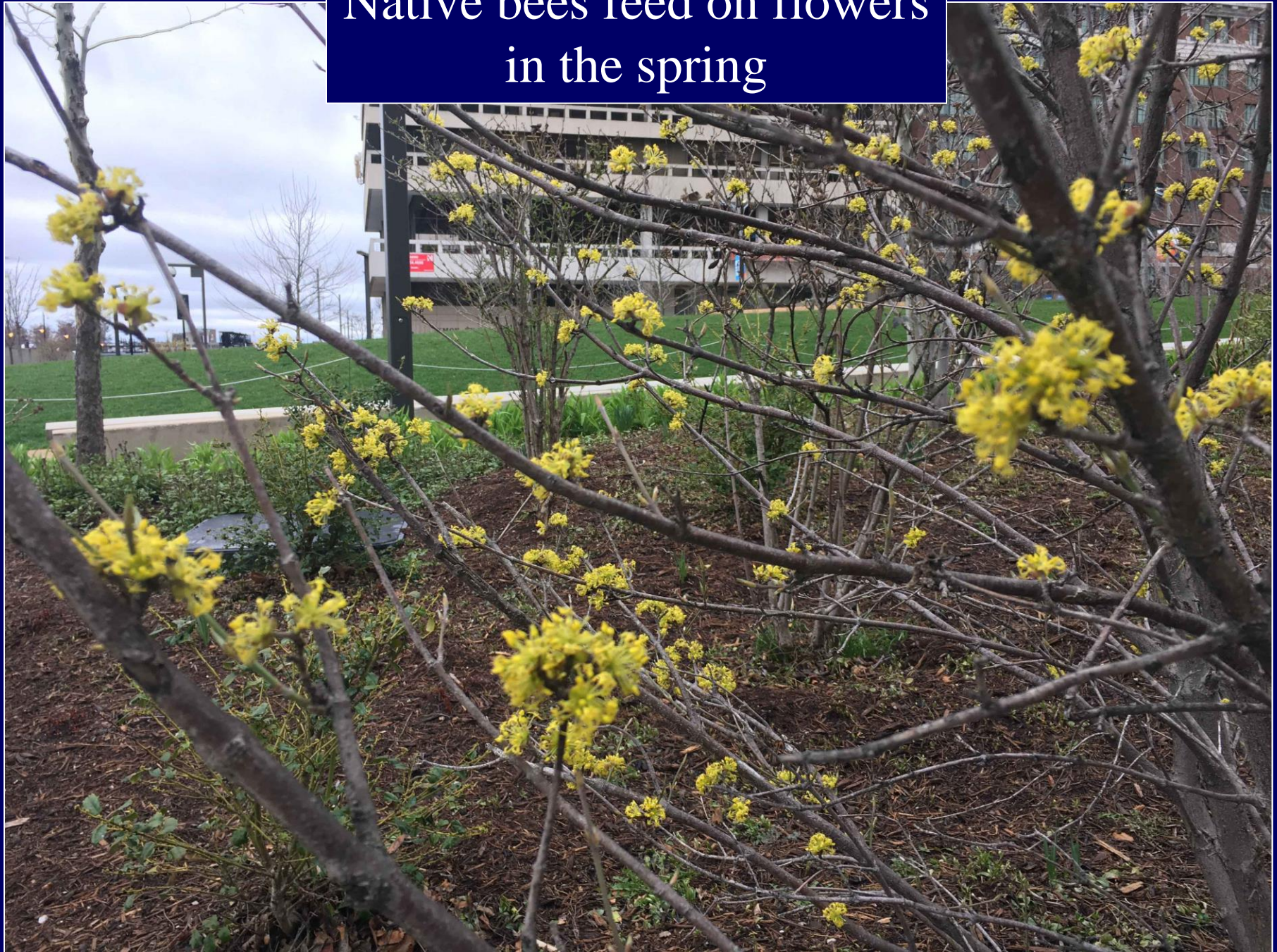
*-beware of folded leaves where caterpillars hide, before harvesting leaves-*



## Spicebush syrup to flavor drinks



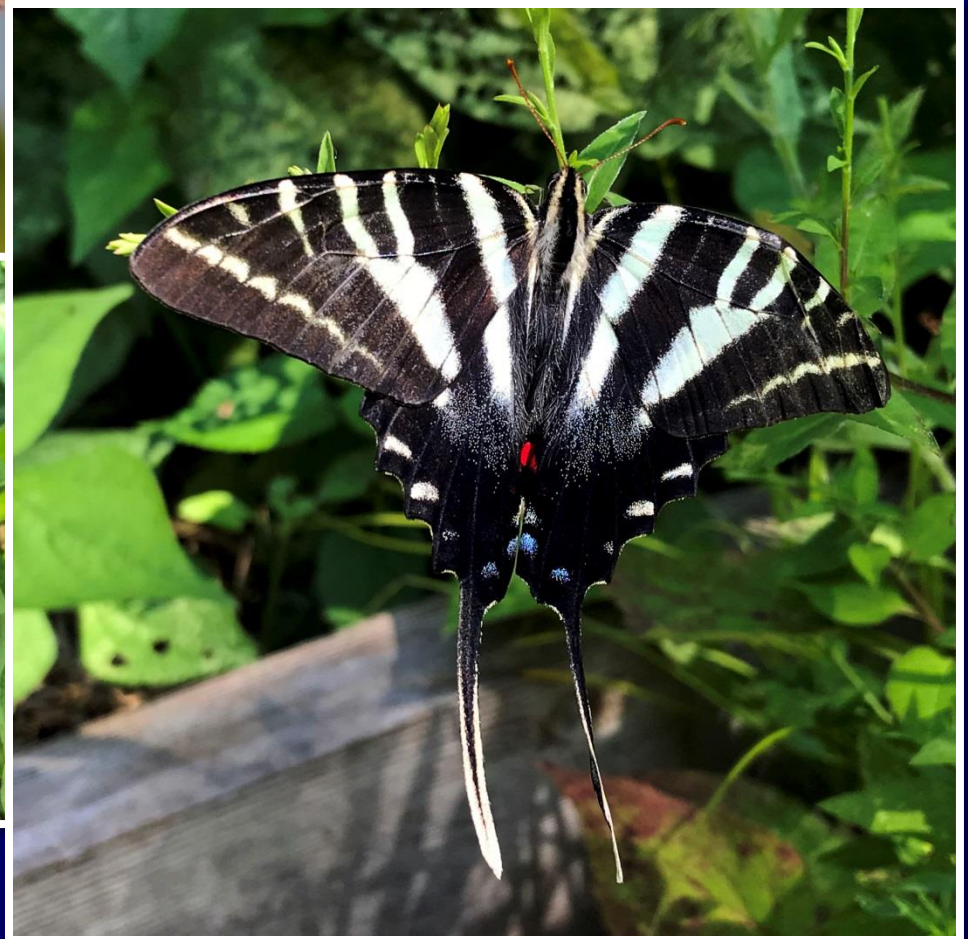
Native bees feed on flowers  
in the spring



Paw paw  
(*Asimina triloba*)



Zebra swallowtail



# Sweet cheese bread with acorn flour

Recipe by Nadia Navarrete-Tindall September 29,2019

## *Ingredients*

- 3/4 cup whole wheat flour (rice flour for gluten free recipe)
- 1/4 cup oak 'acorn flour (if you don't have acorn flour, use regular flour)
- 1 cup crumbled 'queso fresco' (can be replaced with grated parmesan cheese)
- 2 tablespoons kefir or yogurt
- 2/3 cup sugar
- 3 large eggs or 4 small ones
- 1 teaspoon baking power
- ½ cup butter melted- 1 stick
- Wild plum sauce and elderberry jam

## *Directions*

- Heat the oven to 350°F and butter a 9-inch pie pan. Set aside.
- Sift together the flour, acorn flour, cheese and baking powder in a large bowl.
- Incorporate melted butter to dry ingredients and mix with a blender. Add kefir or yogurt and then the eggs one at a time and continue mixing until the mix is creamy.
- Dispense the creamy mix into a pie pan, add wild plum sauce and elderberry jam with a spoon across the top of the batter (about ¼ cup). Spread as much as you can.
- Bake for 30 minutes or until a toothpick in the center of the dish comes out clean.
- Eat warm or cold. It can be served with vanilla ice cream. Enjoy.

# Native edible native plants in Missouri. Short list.

Common name	Scientific Name	Habitat (full sun, shade tolerant, shade)	Moisture requirements (dry, average, wet)	Edible part
<i>Forbs (herbaceous, non-woody)</i>				
Wild onion	<i>Allium canadense</i>	Full sun	Average, good drainage	Bulb, leaves
Wild Leek	<i>Allium tricoccum</i>	Shade	Average, good drainage	Bulb, leaves
Ground nut	<i>Apios americana</i>	Moderate shade	Average, moist	Subterranean seeds
Jerusalem artichoke	<i>Helianthus tuberosus</i>	Full sun	Average to wet	Tubers
Bee balms	<i>Monarda</i> spp.	Full sun	Dry to average	Leaves, flowers
American lotus	<i>Nelumbo lutea</i>	Full sun-moderate shade	Wet	Leaves, seed, tubers
Prairie turnip	<i>Psoralea esculenta</i>	Full sun	Dry to average	Tubers
Passion fruit	<i>Passiflora incarnata</i>	Full sun	Average	Fruits
Mountain mints	<i>Pycnanthemum</i> spp.	Mod. Shade-sun	Dry-average	Leaves, flowers
Cup Plant	<i>Silphium perfoliatum</i>	Full sun, moderate shade	Average, moist	Green pods
Goldenglow	<i>Rudbeckia laciniata</i>	Shade	Ave-Moist	Greens in spring-fall
Stinging nettle	<i>Urtica dioica</i>	shade	Ave-moist	Greens late spring-summer
<i>Woody species (Vines, shrubs, trees)</i>				
Chokeberry	<i>Aronia melanocarpa</i>	Full sun, mod. shade	Dry to moist	Fruits
Paw paw	<i>Asimina triloba</i>	Full sun, mod. shade	Average	Fruits
Pecan	<i>Carya illinoensis</i>	Full sun	Average, moist	Fruits (nuts)
Hazelnut	<i>Corylus americana</i>	Full sun, mod. shade	Average	Fruits (nuts)
New Jersey tea	<i>Ceanothus americanus</i>	Full sun	Dry to average	Leaves
Persimmon	<i>Diospyros virginiana</i>	Full sun	Average	Fruits
Spicebush	<i>Lindera benzoin</i>	Full sun, mod. shade	Ave-moist	Leaves and fruits
Wild plum	<i>Prunus americana</i>	Full sun, mod. shade	Dry to average	Fruits
Mexican plum	<i>Prunus mexicana</i>	Full sun	Average	Fruits
Blackberry	<i>Rubus</i> spp	Full sun, mod. shade	Average	Fruits (berries)
Raspberry black	<i>Rubus occidentalis</i>	Full sun	Dry to average	Fruits (berries)
Golden currant	<i>Ribes aureum</i>	Full sun	Dry	Fruits (berries)
Sassafras	<i>Sassafras albidum</i>	Full sun	Average	Roots
Elderberry	<i>Sambucus canadensis</i>	Full sun, mod. shade	Average	Fruits and flowers

Prepared by Nadia Navarrete-Tindall Email: [NativePlantsandMore@gmail.com](mailto:NativePlantsandMore@gmail.com) Facebook page: Native Plants and More

REFERENCES. 1) Kindscher, Kelly. Edible Wild Plants of the Prairie. University Press of Kansas, 2) Kurz, Don. Shrubs and Vines of Missouri, 3) Elias, Thomas S. and P.A. Dykeman. Edible Wild Plants. Sterling Publishing.

Thank you!



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# PETAL PUSHER

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“... to promote the enjoyment, preservation, conservation, restoration, and study of the flora native to Missouri.”

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Bur oak acorns and their flour. Photo by Nadia Navarrete-Tindall

## Acorn Revival! Cooking Today with an Ancient Food.

By Nadia Navarrete-Tindall, Native Plant Specialist

Native Americans and other indigenous people around the world traditionally used a large variety of native edible plants in their regular diet in the past, and although much knowledge about their use has been almost lost or forgotten, some are still doing it. Today, there is a healthy and growing interest in recovering knowledge about using native edibles. Some that are still consumed in small quantities include paw paw (*Asimina triloba*), elderberry (*Sambucus canadensis*), persimmon (*Diospyrus virginiana*) wild plums (*Prunus* spp.), serviceberry (*Amelanchier arborea*), goldenrod (*Solidago* spp.), goldenglow (*Rudbeckia laciniata*), sunchoke (*Helianthus tuberosus*), ground nut (*Apios americana*), hog peanut (*Amphicarpaea bracteata*),



Leaching tannins from acorns occurs in five stages, as is exemplified by the jars of water used to leach the acorns. Photo by Nadia Navarrete-Tindall

cup plant (*Silphium perfoliatum*), wild leeks (*Allium tricoccum*), nettles (*Laportea canadensis* and *Urtica dioica*) and various mints, to name a few, are also slowly being incorporated into small farming operations and gardens as specialty crops. Goldenglow or Sochan (*Rudbeckia laciniata*) and wild leeks or ramps (*Allium* spp.) are being reintroduced among families of the Eastern Band of the Cherokee in partnership with the North Carolina Arboretum in Asheville, North Carolina.

One common Native American food was oak acorns, and although their use is much less common today, they are still useful and tasty when prepared in a number of ways, so I will discuss that a little in this article. According to the United States Department of Agriculture, raw oak acorns are rich in fat, protein and carbohydrates and also contain potassium, phosphorus, manganese, magnesium, calcium, and other minerals. According to the Missouri Department of Conservation and George Yatskievych in *Steyermark's Flora of Missouri*, there are at least nineteen native species of oaks (*Quercus* spp.) and sixteen hybrids. They are divided into two groups: the white and the red-black oaks. The leaves of red and black oaks are lobed or entire with the major veins projecting as bristles. White oak leaves are lobed with no bristles. Oak trees are among the most important

trees in Missouri, being dominant species in woodlands, forests and savannas. Their acorns are a significant food for mammals, birds and insects, and even for domestic pigs. For humans, oak acorns can be used to make flour or added to regular meals for their nutty flavor.

Since I first became interested in native edible plants, I learned about the edibility of oak acorns. I read many books and articles and listened to personal accounts that acorns can be processed to make flour to replace or mix with wheat flour in desserts. However, I

always hesitated to go through the process myself because it sounded cumbersome and not worth the time. I hardly heard anything good about it, including that the flavor was not good or was too bland. Then, in September 2017, I went with Jen Sieradzki, landscaper and educator at the Shaw Nature Reserve, to the 'Midwest Wild Harvest Festival' in Prairie Du Chien, Wisconsin. There, during a potluck style dinner, participants shared tasty dishes prepared with acorns including a persimmon cake and savory dishes. Jen had recently offered a class about Wild Native Edibles, and she said that, "...the acorn burgers..." that she had prepared for attendees were, "...the star of the show."

The event and Jen inspired me to experiment on my own, so I started collecting acorns from our pin oak tree (*Q. palustris*). However, they have lots of tannins and are very tiny, so they weren't worth all the work to me. Then I remembered a bur oak (*Q. macrocarpa*) tree in our neighborhood that is very productive. I have collected those acorns in the past to make ornaments. These past two years, acorn production has been very high, and there were so many that did not seem to be consumed by squirrels or other animals. Black walnuts (*Juglans nigra*) are

also abundant, so I don't feel too badly taking some of the squirrels' food. All acorns are edible, though tannins make them bitter, but white oak acorns have less tannins, and some white oak acorns are even naturally sweet.

As for almost every native edible plant that I write about, there are reports of toxicity in some cases. In the case of acorns, after leaching, they are edible for humans; however, because horses and cattle consume the acorns outdoors, the tannins can be toxic to them, especially during dry periods when no other forage is available. There are even some reports of death. Wild animals and pigs, however, are not known to be killed by acorns.

So, after reviewing a few references, including *Edible Wild Plants* by Thomas Elias and Peter Dykeman, *Adventures in Edible Plant Foraging* by Karen Monger, *Native American Food Plants* by Daniel Moerman, *Uses of Plants by the Indians of the Missouri River Region* by Melvin Gilmore, and several others, my husband, Randy, and I were ready for our first test.

Acorns can be collected as soon as they fall from the trees and stored in a cool place until just before processing. Acorns are parasitized by weevils and other beetles, so some may be damaged. A tiny hole



Salvadoran Quesadilla with an American Twist . Photo by Nadia Navarrete-Tindall

in the acorn means that the acorn had weevils and should be discarded. To be sure they are good for processing, eliminate the fused bracts (caps) and place the acorns in a bucket with water, saving those that sink and discarding the floaters.

To process, after removing the bracts, crack the nuts open (a hammer or an adjustable channel-lock-type pliers work well), then proceed to discard the pericarp (acorn shell). Remove the thin seed coat. If the seed skin is hard to remove, try drying the acorns until the skins become brittle and detach themselves from the acorns or are easily removed. To remove tannins to make them palatable for humans, leaching is necessary. If you are planning to use the acorns to make burgers, stews or other savory dishes, they can be cooked in hot water until soft.

If acorn flour is the final product, leaching should be done with cold water. To leach the acorns for flour, coarsely chop the acorns by hand or with a food processor, and proceed to leach them in a container with cold water. Initially the water will be light brown, so change the water daily for several days until the water is clear or the acorns are no longer bitter (see photo). In the past, leaching was done by placing the acorns in a basket in running water in streams. Depending on your acorns, this may take five days to two weeks. It took us only five days to leach bur oak acorns. After leaching, chop the acorns in smaller pieces in a food processor, until getting a 'corn meal-like' texture. Place the acorn meal on trays lined with



Try a warmed slice with ice cream and maple syrup. Photo by Nadia Navarrete-Tindall

wax or parchment paper. Dry it in an electric oven overnight by just using the heat of the oven light or use a dehydrator. The acorn meal should be stored in containers in a cool place for a couple months or, for longer periods, store them at freezing temperatures to protect from deterioration.

This may sound like a lot of work, but we did not spend much time on each step. It takes a few days, but it is not difficult to do, and it is fun to eat something so abundant and easily found around us. If you are lucky to have access to bur oaks, or others like swamp chestnut (*Q. michauxii*) or overcup oak (*Q. lyrata*), it should be worth the try.

There are a number of cookbooks and websites with recipes calling for acorn flour. To get you started you can follow my own recipe for a traditional sweet bread called “quesadilla”, prepared in my native El Salvador. It is not a savory dish like the “Mexican quesadilla”, although both have cheese, or “queso” in Spanish, as one of the main ingredients. See the recipe as follows:

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### Salvadoran Quesadilla with an American Twist

(Serves 12-16 portions)

#### Ingredients:

- ½ cup whole wheat flour (use rice flour for gluten free recipe)
- ½ cup oak ‘acorn meal’
- 1 cup grated Parmesan cheese
- 2/3 cup sugar
- 3 large eggs or 4 small ones
- 1 teaspoon baking powder
- ½ cup butter melted
- Sesame and/or flax seed

#### Directions

- Heat the oven to 350° and butter a 9-inch pie pan. Set aside.
- Sift together the flour, acorn meal, cheese and baking

powder in a large bowl.

- Incorporate melted butter into dry ingredients and mix with a blender. Add the eggs one at a time and continue mixing until the mix is creamy.
- Dispense this creamy mix into the pan and cover the top with sesame and/or flax seeds. Bake for 30 minutes or until a toothpick in the center of the dish comes out clean.

It is better to eat it warm. It can be served with vanilla ice cream with maple syrup on top.



Cut out and add  
to your recipes!