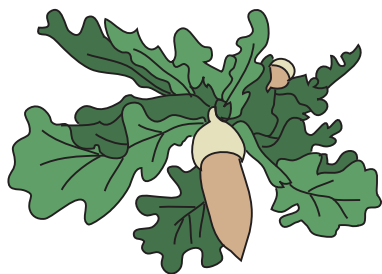


Wild

Edible NoteBook



June
2015



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Edible NoteBook

Managing Editor & Content Writer:

Erica Marciniak
aka WFG

Copy Editor:

Gregg Davis

Contributors:

Ellen Zachos
Wendy Petty
Maria Brumm

Photography:

Wendy Petty
Gregg Davis
Ellen Zachos

Info:

www.wildfoodgirl.com

Social Media:

YouTube: [@wildfoodgirl9148](https://www.youtube.com/@wildfoodgirl9148)

Instagram: [wild.food.girl](https://www.instagram.com/wild.food.girl)

Facebook: [wildfoodgirl](https://www.facebook.com/wildfoodgirl)

Contact:

erica@wildfoogirl.com

Hi and thanks so much for checking out the *Wild Edible Notebook*, a monthly collection of stories about foraging and using edible wild foods.

This month's edition centers on two wild plants. The first is elderberry, a common shrub that produces edible flowers, followed by edible berries. This story is by foraging author Ellen Zachos, who I am thrilled to feature this month. Following that is an interesting piece on red elderberries—thought by many to be poisonous or at least icky cooked—by Maria Brumm. Ellen and Wendy Petty also contributed some lovely recipes for elderflower beverages and desserts. Next are two pieces on crops from kochia, an edible invasive spinach relative that is not well known. In spring and summer, kochia offers us fresh greens. In fall, the seeds can be processed to make tonburi or "land caviar," which is used in Japanese cuisine and great on sushi. The June 2015 issue concludes with a generous Wild Eats section, including four elderflower recipes, two tonburi recipes, and a spicy mock wasabi you can use with your own wild-infused sushi.



*Even in the Great Sand Dunes,
I was looking for plants. WFG
photo by Gregg Davis.*

2024 Update:

Begun as a free publication in 2011, the *Wild Edible Notebook* was available by subscription from 2014-2015. It went on hiatus after that so I could undertake other pursuits, chief among them a book I am writing. I decided to reissue the *Notebooks*, a process that involves reading through and correcting any glaring errors. I will admit that my thinking has evolved on some topics since then, but for the most part I have not rewritten any stories.

For current writing, please visit my blog at wildfoodgirl.com, or social media at Facebook ([wildfoodgirl](https://www.facebook.com/wildfoodgirl)) and Instagram ([wild.food.girl](https://www.instagram.com/wild.food.girl)), where I post regularly.

Sincerely,
—WFG

Contents:

Elder Magic:
Flowers & Berries

Red Elderberry
Juice & Salad

Kochia for
Dinner

The Complexities
of Kochia

Land Caviar

Beverages &
Desserts with
Elderflowers

Making &
Using Tonburi

Mock Wasabi
Sauce with
Wild Mustard



This photo shows spicy peppergrass rosettes and their taproots (top). The mock wasabi sauce I made included both parts. In front of them are the shoots of Canada thistle, which I washed and used like bean sprouts in sushi rolls.

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Elder Magic

By Ellen Zachos

The flat-topped flower clusters of a cultivated elderberry. Photo by Wendy Petty.

I'm a sucker for a good story. Give me an ancient Greek myth or a twisted fairy tale and I feel like I'm eleven again. There are many stories about the genus *Sambucus*, and while none of them may be especially practical, they are certainly entertaining. When I find a plant with such an illustrious history that also provides not one, but two tasty harvests—well that's a plant worth knowing.

The word elder comes from the Anglo-Saxon

word "æled," which the Concise Anglo-Saxon Dictionary defines as "to kindle a fire." In fact, the pith is easily pushed out of elder's hollow stems to a tube useful for coaxing glowing embers into flame.

Medieval European cultures attribute all sorts of magical powers (both good and evil) to *S. nigra*, the species of elderberry native to that continent. In *The Book of Herbs* (1903), Lady Rosalind Northcote summarizes the elderberry's



superpowers. In Denmark, people believed that a dryad lived inside each tree and that permission must be asked of the dryad before the wood could be cut and used. If you didn't ask permission, the spirit within the elder followed the wood and haunted its owners. Also in Denmark it was said that if you stood under an elder at midsummer, you would see the king of the fairies.

Russians believed elder shrubs kept evil spirits away, and Sicilians thought the wood would kill snakes. Serbs used a stick of elder for good luck in wedding ceremonies and in 17th century England, people believed elder was never struck by lightning. Elder was often planted near homes and fields to take advantage of its protective powers.

In addition to these

*A flowering elder in Ohio.
Photo by Edsel Little,
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magical properties, elder was appreciated for its more practical culinary and medicinal virtues. Today, elder is often called nature's pharmacy. Both elderflowers and elderberries are used to treat a wide range of ailments, from colds, fevers, and sinusitis, to constipation. Call me single-minded, but my interest in the plant is entirely gustatory.

Elder leaves are pinnately compound, meaning each "leaf" is made up of leaflets arranged opposite one another, plus a terminal leaflet. Notice the seven leaflets on each leaf in this picture. The leaves themselves are also opposite one another, their stems meeting along the central stem, and the leaflets have serrated margins. The underripe berries pictured here are borne in a flat-topped cluster called a cyme. They are toxic when underripe.





Elder Crops

The elder is a generous shrub, producing two distinct edible crops: large, fragrant clusters (cymes) of white flowers in spring and abundant fruit in late summer. Its foliage is opposite and pinnately compound. Elder grows best in full sun and a moist, well-drained soil. It will tolerate some shade, but will flower and fruit less profusely with less sun.

There are two general categories of elders: those with flat-topped clusters of blue/black fruit, and those with cone-shaped clusters of red or sometimes black fruit. The latter, referred to as red elderberries, are widely considered poisonous, although Sam Thayer points out they were used by First Nations peoples in the Pacific Northwest (*Nature's Garden*, 2010). However, red elderberries are different from the blue/black varieties. Their berries should always be cooked, he writes, as

A flat-topped cluster of edible, purple-black elderberries found under cultivation in the Denver area.



Top: Red elder has berries that are red (pictured) or black in color. The clusters are pyramid-shaped, not flat-topped. Red elderberries are reported to be toxic raw, and supposedly less than tasty cooked. The toxicity and culinary properties of these pyramid-shaped berry clusters are very different than flat-topped, blue or black elderberries. Colorado's species of red elderberry has been called *Sambucus racemosa*, but Weber and Wittmann reclassify it as *S. microbotrys*; the black variety is *S. microbotrys* var. *melanocarpa* (Colorado Flora, 2012). **Left:** Red elder also bears pinnately compound leaves whose leaflets have serrated margins.

they are reported to be toxic raw and can cause nausea. Furthermore, his experiments revealed the taste of the red fruit to be so inferior as to make it unworthy of the time it takes to harvest and process it.

In contrast, several species of blue/black fruited elderberries are not only safe to eat, but highly recommended. In Europe, *Sambucus nigra* is the dominant species. In the eastern two thirds of the United States, you're most likely to find *S. canadensis*. Both have dark blue, almost black fruit and there is some controversy over whether they are separate species or varieties of a single species. Some foragers claim that the fruit of *S. nigra* has a stronger flavor than that of *S. canadensis*, but I have no personal experience with this comparison.

In the western United States, the most common species is *S. caerulea* and in the desert southwest, *S. mexicana*. Both of these have blue fruit with a white bloom similar to that of grapes. Again, there is disagreement as to whether these are two distinct species and some authorities list *S. mexicana* as a synonym for *S. canadensis*.



Top: Bloom-coated, powder-blue elderberries are said to be tastiest. Photographed in California by David O. **Bottom:** Cymes of ripe elderberries hang from the weight of the berries. Photographed in England by Andy Rogers. Photos licensed for reuse under Creative Commons; both have been cropped.

White Flower Clusters, Edible & Poisonous By WFG

Just because a plant has flat clusters of white flowers doesn't mean it's edible. In fact, some of our most poisonous plants produce white flower umbels. Those include poison hemlock (*Conium maculatum*) and water hemlock (*Cicuta spp.*).

It is easy enough to distinguish elderberry from poison hemlock if you learn the leaves, since poison hemlock has carrot-like leaves that are several times pinnately compound, with leaflets that are deeply toothed or lobed; in contrast elder leaves are only one time pinnately compound, and the leaflets are serrated.

Water hemlock, however, might be considered more similar. Like elder, it likes wet habitats and may be found growing at a similar height near elder, Sam Thayer explains in *Nature's Garden* (2010). You wouldn't want to accidentally snip a



Elderberry



Poison hemlock



Water hemlock. Photo by Wendell Smith, licensed for reuse under Creative Commons.

water hemlock flower cluster into your bag, as the plant is deadly poisonous.

Fortunately, they can be distinguished

Water hemlock.
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from one another. For one, water hemlock is a perennial herb and elder is a woody shrub, Thayer explains. The leaves of elder are only one time compound, whereas those of water hemlock are two or three times compound.

The umbels of water hemlock are spaced apart; whereas the cymes of elder are more tightly packed. See *Nature's Garden* (2010) for the full treatment.

In the meantime, keep in mind that not all plants that produce flat-topped white flower clusters, particularly those that

produce umbels (where the stems of each floret joins at a single point), are edible.



A species of water hemlock; from
American Medical Botany, 1817-1820.



Elderberry

Images courtesy of the Biodiversity
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All four species (or varieties) can be harvested and processed in the same way, although taste varies among the four. Only the flowers and ripe fruit are considered edible; all other parts of the elder contain cyanogenic glycosides, which, when consumed in large amounts, can result in cyanide poisoning. So don't go around chewing on elderberry twigs and leaves. Raw elderberry fruit contains smaller amounts of these same compounds. Some people feel sick after eating raw or even cooked elderberries,

A tall elder bearing flat-topped white clusters of tiny edible flowers. Photo by Wendy Petty.

but many people eat them without complaint, myself included. To be perfectly safe, cook your elderberries before eating them. They taste better that way anyway.

In nature, *Sambucus* are often found in abundance along streams and lake shores. In Pennsylvania they almost always grow near poison ivy. Before I step up to deflower an elder, I look down to make sure I'm not stepping in



Top: The flowers and berries of blue and black elder are edible, but the other parts are toxic.

Left: Mind the poison ivy when you harvest elderflowers from the wild, as they often grow next to one another.

poison ivy. I usually am. Feral elderberries can be large, sprawling plants, but new cultivars have been bred for interesting foliage color (purple, chartreuse) and smaller stature, making them excellent garden plants. Their flowers and fruit are just as worthy as those of



If you like fried food, elderflower fritters are a traditional preparation. Just dip the flower heads in batter and fry. Or, bring out the flowers' delicate flavor in a champagne or cordial.

the straight species, but since they've been bred for their foliar good looks, they usually produce fewer blooms and consequently, less fruit.

Elder Flowers

Elderflowers are traditionally used in fritters, made by dipping the entire flower cluster in batter, frying them, then covering the whole thing in powdered sugar. I think this is a waste

of the elderflower, whose flavor is pretty much obscured by the taste of fat and confectioner's sugar. I have nothing against sugar and fat, but I prefer to feature the flavor of the elderflower itself. Elderflower champagne is a light, bubbly, barely alcoholic beverage that is enormously refreshing on a warm summer's day. Elderflower cordial is a syrup that can be used as the base for beverages (both alcoholic and non-alcoholic), ice creams, and sorbets. Elderflower liqueur (made from the European elder, *S. nigra*) is a popular cocktail ingredient, and Shokata is an elderflower-lemon soda



sold by Fanta in Eastern Europe. The most delicate and surprising way I've ever tasted elderflower? Infused in cream to make panna cotta.

Collect the clusters of white flowers when they are fully open but before the edges start to turn brown. Flowers that are even slightly past their prime may have an off, musty flavor. And don't gather flowers right after a rain. The pollen of elderflowers contains a natural yeast that's useful in fermenting elderflower champagne; this will be washed away in a storm. Of course, if you want to harvest elderberries later in the season, you have to leave some flowers behind for the bees to pollinate, so fruit can form.

Elder Berries

In late summer, elderberries hang in clusters of fruit so heavy that they bend the shrub's branches almost to the ground. Gather the fruit as soon as it ripens to a dark, purple-blue. (You'll have competition from the

For a very simple elderflower liqueur, separate the florets from the cymes, removing as many stem bits as possible. Combine flowers with vodka in a jar and let sit in a dark place for a couple weeks to a couple months. Then strain and add sugar or sugar syrup.

birds, so don't procrastinate.) Harvest the fruit by cutting the stem of the cluster where it emerges from the branch.

If you're going to juice the fruit, there's no need to remove each berry from its stem, but if you're going to use the fruit whole, you'll want to de-stem it. This can be quite tedious. The easiest way is to freeze the fruit. Once frozen, the fruit comes off the stems easily, but before freezing, you'll have to tug at each small berry.

One more word about using the whole fruit: seeds. Some people eat them and some people don't. I have, but I don't like them. They're not insignificant and I'd rather not have that crunch in my jam or pie or chutney.

So whatever I make with elderberries, I remove the seeds and use the pulp. Freezing and thawing the fruit softens the pulp enough to let it easily pass through a food mill.

Raw berries taste slightly bitter or tannic, but once cooked, the fruit is sweet and mild, and has a deep, rich color. Elderberry vinegar makes a lovely salad dressing. Elderberry wine is a jewel-toned classic, and elderberry chutney is an excellent complement to dark meats. Elderberries also combine well with tart, dark fruit like Oregon grape or chokeberry to make a fruity

Separating elderberries is a tad tedious, best done with friends. Some people like to freeze the fruit clusters first.

Photo by Gregg Davis.





liqueur, and elderberry and sumac juices blend together to make a delicious and lovely jelly.

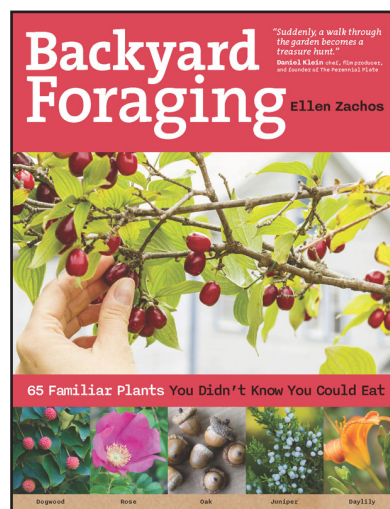
Elder Fairies & Flavors

So while I wouldn't mind meeting the fairy king at midsummer (as long as he's a nice fairy and not a mean fairy), what I love most about elder are the flavors. Light and floral in June, dark and rich in August. Now that's magic.

Top: The prep work is done, and now it's time to cook.

Photo by Gregg Davis.

*Right: For more by Ellen Zachos, check out **Backyard Foraging: 65 Familiar Plants You Didn't Know You Could Eat** (2013). It's a novel take on foraging that focuses on common edible plants, including landscaping plants. You can also find stories and recipes by Ellen Zachos at foraging.about.com.*



Red Elderberry Juice

By Maria Brumm

Nancy Turner summarizes the general Pacific Northwest native opinion of red elderberries (*Sambucus racemosa*, not to be confused with the much more delicious black and blue elderberries) as follows: "Red Elderberries were not generally regarded highly as food, and were frequently mixed with other types of berries to make them more palatable. But some people really enjoy them." Hank Shaw deems them "at best nasty."

Taking these sorts of statements as a challenge is one of my fundamental character flaws—the same flaw that drives me to bypass perfectly adequate chain restaurants by the side of the highway in favor of a greasy shack that is not going to be the home of the world's best-kept secret amazing hamburger. (Unless you think the best-kept secret amazing hamburger is



Red elderberry, photographed in Vail, Colorado.

delivered to ramshackle dives across the country by a Sysco truck and served while it's still a little bit frozen in the middle.) Still, I keep thinking that *maybe this time it will be different*. Maybe I will be part of the tiny minority of persons who really enjoy red elderberries!

So I picked some berries, laboriously destemmed them (the stems are poisonous), ran them through a food mill, boiled the juice for half an hour to denature the cyanogenic glycosides, and then strained the juice through my hops bag to remove all the seeds the food mill didn't catch (the seeds are poisonous). The juice tasted pretty gross by itself, so I left it in the fridge for a week before I finally screwed up the courage to try some different ways of making it palatable.

The Mr. wrinkled up his nose and insisted that it had "that nasty vegetable flavor," but he is very silly, because it is obviously a completely different nasty vegetable flavor than the one that's been plaguing me in my vodka infusions—I could taste some bitterness but it wasn't *sulfurous*.

So I guess if you use the phrase "really enjoy" to mean "tolerate if mixed with a lot of sugar and a little salt" then I am in fact one of the tiny minority of persons who really enjoys red elderberries! I think the flavor is something like tomatoes combined with cranberries combined with orange juice that's gone a bit off.

A red elder in flower. Notice the cone-shaped flower cluster, which helps to differentiate red elder from the "much more delicious black and blue elderberries."

Photographed above Fairplay, Colorado, among conifers.



Red Elderberries: Probably Only a Little Bit Poisonous

So, there are conflicting reports on the internet about whether red elderberry fruit is toxic, and if so, how toxic. It's amply clear that there are dangerous levels of cyanogenic glycosides in the stems, leaves, and roots of most elderberry species, but I wasn't able to find anyone reporting actual cyanogenic compound concentrations in red elderberry pulp. This is one of those things where the poison is in the dose, and the dose is determined by both the starting levels in the plant, and the amount that you reduce those levels through various preparation and storage methods—cyanogenic glycosides are destroyed by both heat and time.

The ethnobotanical record is pretty clear on



*Red elder in Vail,
Colorado.*

both this berry's tummyache potential and its ultimate edibility. Red elderberries have been an important food source in the Pacific Northwest for thousands of years; the spat-out, undecayably toxic seeds are a common feature of archaeological digs. The berries are always eaten cooked. Usually they are pit-cooked. You dig a pit and fill it with hot rocks, then food; then you add water before covering the whole assemblage up and letting it sit overnight. This method uses a moist, gentle heat. The berries are then dried over a fire into cakes for storage. People who ate them were careful to spit out the seeds, and would rinse their mouths out with water in order to make sure they got all the seeds. Other precautions against getting sick included eating salmon afterwards and drinking extra water.

I didn't eat any salmon, but I did have some hard-boiled eggs after figuring out my red elderberry salad, and I felt fine.

Kale Salad with Red Elderberry Juice

Red elderberries have a much higher fat content than most berries; if you let the juice sit in the fridge you will see a pale orange layer form on top. I didn't do much taste testing to see whether it's more delicious with or without the fat.

Ingredients:

- 1 bunch kale
- 2-3 Tbsp red elderberry juice (boil this for a good long time and be sure to strain out all the seeds) mixed with as much sugar as you can dissolve, and a pinch of salt
- 1 green onion
- *This salad would probably have benefited from some raisins but I didn't have any.

Instructions:

1. Chop the kale and the green onion.
2. Massage them with the red elderberry juice and let it all marinate for half an hour before eating.

For more wild food experiments by Maria Brumm, check out greengabbro.net.



References

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Food Plants of Coastal First Peoples (Royal BC Museum Handbooks)

Kochia for Dinner *By WFG*

A spring drive through Colorado's San Luis Valley from Salida to Durango treats the eyes to vistas of stunning snow-capped peaks against dry, desert scrub interspersed with circular farm fields like giant emerald gemstones. Bordering the methodical green growth in these round plots one may see a faithful carpet of gray-green plants that covers the ground so completely it appears as if they were planted intentionally too. Upon closer inspection, the aquamarine sea reveals itself to be hundreds upon thousands of young plants, each its own rosette of narrowly oval, softly fuzzy leaves.



Kochia rosettes bolting skyward. The best part to eat on these would be the new, top growth.



A sea of gray-green kochia alongside greener plants, shot from the car window in the San Luis Valley. Other plants, like fringed sage, appear like a gray-green ground cover from a distance too, so close-up inspection is required to confirm you have found kochia.

This pendant weed is kochia, known also as burning bush (*Kochia scoparia* syn. *Bassia scoparia*). Native to Russia, kochia was introduced to North America as an ornamental plant, popular for hedging gardens or as a backdrop planting due to its conical shape and attractive red color in fall, according to a USDA invasive species profile (2005). It is now found throughout the United States, though I have primarily observed it in the West, where it covers large areas of farm and rangeland.

Finding Kochia

Kochia is in the Amaranth family—a group that includes cultivated spinach, chard, beets, and quinoa, as well as a number of wild greens such as lamb’s quarters and amaranth (of the genera *Chenopodium* and *Amaranthus*). Other wild Amaranth family members include orache (*Atriplex heterosperma*), a tasty green with pre-salted leaves that is regionally abundant in parts of the West; desert *Atriplexes* including four-wing saltbush (*A. canescens*) and shadscale (*A. confertifolia*); and strawberry blite (*Blitum capitatum* syn. *Chenopodium capitatum*), a wild spinach that produces interesting, bright-red, ball-like flower clusters. Now, I am happy to add kochia to the list of spinach-like greens in my diet.



Here in the West, kochia flourishes in spaces between tilled fields and highways, where it will fill the brown void for miles. Nearby towns are likely to host large populations in abandoned lots. It loves disturbed ground and alkaline soils from parks to river floodplains, and even colonizes large expanses of sagebrush. In Colorado kochia is found, not only in parts lower, but here up high at 10,000 feet where I live, making its appearance later in summer and persisting through fall.

Small, healthy rosettes of kochia cover an expanse of disturbed ground in Fort Collins.

"It has spread in such numbers that few places in Denver are without it," Alan and Sue McPherson report in their 1979 book, *Edible and Useful Wildplants of the Urban West*. City dwellers may recognize the mature, branching form of this unassuming weed growing in small colonies from sidewalk cracks, or covering entire prairie dog fields between urban developments. Kochia is adaptable

and can grow in sun or shade. A USDA report describes it as “a serious weed in pastures and rangelands” in the Great Plains and the Pacific Northwest, though it is also found in New England, the Midwest, and parts of Canada (Esser, 1995). In the Northeast, it prefers abandoned fields, pastures, vacant lots, and roadsides, as well as coastal grasslands and salt marsh edges, according to the Invasive Plants Atlas of New England (eddmaps.org). It can also be found in South America, Africa, Europe, and parts of Asia (Friesen et. al., 2009).

Kochia scoparia is an annual whose young rosettes sport alternate, narrowly oval, gray-green leaves fuzzy with

This is the same patch of Fort Collins kochia. Because the ground cover was nearly 100% kochia, I snipped the tops into my collecting bag in good-sized swaths, as if giving Mother Earth a haircut, but only taking off a couple inches.



soft hairs. It often occurs in large colonies, and branches as it grows. Kochia flowers are small, inconspicuous, and ball-like, similar to other Amaranth family members. They are borne at the end of the stems and in the leaf axils in clustered spikes with a long, skinny leaf at the base, and shorter leaves interspersed within each cluster. Plants can grow to 5 or 6 feet tall. The stems start out greenish but turn a brilliant red in fall,

which for a time contrasts with the yellowing leaves and fruits. Later, dried, desiccated kochia plants are among those that detach and whirl across the desert plains, joining salsola (*Salsola* spp.), tumble mustard (*Sisymbrium altissimum*), and other so-called “tumbleweeds” that disperse

Each of kochia's flower clusters has small leaves interspersed therein. Look to the base of the clusters to find a skinny leaf that is many times longer than the flowers.





their seeds in this manner. The seeds of kochia, rubbed from their dry fruits, are black, flat, and dimpled.

Kochia Greens as Food

The McPhersons explain that kochia greens can be cooked and eaten as potherbs. They are “very good tasting and are a flavorful addition to kochia stroganoff,” they write. The authors include recipes for the stroganoff as well as a baked casserole made with kochia and almonds in their book on useful Denver plants (1979).

I think kochia greens are pretty good, but find they have a mild flavor. They also have a slight fuzziness to them that some might find off-putting. This can be minimized by collecting

Top: Here the kochia has started to bolt. The best greens will be at the growing tips, so snip off the top two rows of leaves and use those, including the top stem where soft.

Bottom: Creamed kochia tips over noodles with salmon. Perhaps you could pull it off better than I did? It wasn't bad, but nothing to write readers about just yet. Um.





just the young shoots or fast-growing tips, and including kochia in preparations where the texture is less noticeable, such as quiches and other savory pies.

My early experiments with kochia were not all that successful. I remember boiling a batch for 8-10 minutes and finding the results rather chewy. Once I tossed the boiled greens into rotini pasta noodles with salmon flakes and creamy spruce tip yogurt sauce. My notes on that night read: "Crazy as it sounds, it didn't taste bad at all. Gregg actually followed me into the kitchen from his room to chase down a few extra bites." But later I recall throwing out the leftovers.

I wouldn't say kochia is as desirable as, say—juicy organic spinach, lamb's quarters, or the deliciously-salty spearheads of

*A spring take of wild vegetables. Clockwise around the outside from bottom left, starting with asparagus: asparagus (*Asparagus officinalis*), musk mustard (*Chorispora tenella*), whitetop mustard (*Cardaria draba*), orache (*Atriplex heterosperma*), prickly lettuce (*Lactuca serriola*), tumble mustard (*Sisymbrium altissimum*), wintercress (*Barbarea vulgaris*), salsify (*Tragopogon dubius*), Dame's rocket (*Hesperis matronalis*), and garlic mustard (*Alliaria petiolata*). In the middle, on the left, under the giant asparagus head, is kochia (*Kochia scoparia*); to the right of that is curly dock (*Rumex crispus*). Do you have any questions?*

orache. But it is an edible wild green that is regionally abundant and can make a good food source, especially for those of us who live in dry or high altitude regions where the growing season is short and wild food is less easy to come by. It would be remiss of us to



not at least consider kochia for end-of-the-world survival scenarios, if not for a free and plentiful source of organic greens.

Good in Pies

My most successful kochia dishes to date have been variations on greens-and-potato pies. The first time I made one, I styled it after a Potato and Spring Greens Rustic Pie; the recipe is available online at Seasons Best Eats. This involved folding two bunches of wild greens—I used mixed mustard greens and kochia—with mashed potatoes, cheese, and sautéed onions, packing it into a crust, and baking at 425 degrees (F) for 30-40 minutes. I topped mine with a final melt of tasty Robusto cheese, and the pie was delicious.

This savory pie, made in an acorn-and-oats crust, involved a filling of mashed Jerusalem artichokes, sheep cheese, cream, and assorted wild greens in bulk.

The second savory pie involved an absolutely divine filling in which a mash of long-cooked, cultivated Jerusalem artichokes (done in the crock pot with bacon fat and broth), cream, and a French sheep cheese I found in the grocery store's discount bin took the place of potatoes. For greens I again used kochia along with orache and musk mustard (*Chorispora tenella*). The acorn-and-oats crust left something to be desired, but the filling was amazing—worth chewing through the crust not to miss any. This pie will be a work of art once it's perfected.

This year I have also made use of raw kochia



greens tossed in salads with other greens such as young prickly lettuce (*Lactuca serriola*) and wild mustards. They provide a good balance with the pungent mustard greens and bitter lettuce, and the tips have a slight juiciness to them that I find both surprising and pleasant. For storage, I have been blanching kochia tips in boiling water for 1-2 minutes, draining, squeezing out the excess water, and freezing. Later, I will thaw them out, chop, and drop them into whatever I'm making.

In his 1974 book, *A Dictionary of Plants Used by Man*, George Usher writes that kochia is cultivated in China and Japan for its young shoots, which are used as a vegetable. I have not found another source to corroborate that claim, but the plentiful seeds of kochia—collected in fall from mature plants—are

In this salad, mild and juicy kochia greens provide a good balance of flavor alongside pungent mustard greens and bitter wild lettuce.

dried, boiled, soaked, and rubbed to make tonburi, or “land caviar.” The seeds are edible and sproutable, Cattail Bob Seebeck writes in his 2012 textbook, *Survival Plants*, where he recommends we “roast seeds lightly then grind into flour for flatbreads, pancakes, and tortillas.” Perhaps one day I will use them in a pie crust.

Similar Plants

One of kochia's known associates is a related species, five-hook bassia or five-horn smotherweed (*Bassia hyssopifolia*), also a gray-green, branching, non-native plant found on alkali flats and disturbed ground. According to

the University of California's pest management program, the seedlings of five-hook bassia are indistinguishable from those of kochia, both having linear to narrowly lance-shaped, gray-green first leaves with soft white hairs. However, many authors write that five-hook bassia is hairier than kochia, from rosette to flower spike. The two plants are most easily told apart by their fruits. The small, seed-containing fruits of both species have five lobes, but those of five-hook bassia have hooks on the end of each lobe, whereas those of kochia are knob-like or flat and winged. Other distinguishing characteristics put forth in the literature seem less reliable, and there is a dearth of photographs of young rosettes and mature, dry specimens. Sam Thayer helped me key out flowering specimens of my local species with

Top: A young rosette of kochia.

Bottom: Could this be five-hook bassia? Don't ask me; I'm still trying to track that plant down. This one is certainly too hairy, and the hairs are too stiff, to be kochia. **2024 edit:** No it is not five-hook bassia, but I'll have pictures of that plant in my book!



this distinction: “Each flower (or cluster) on kochia is in the axil of a linear leaf that is many times longer than the flower or fruit, while on *Bassia hyssopifolia* the bract is ovate-lanceolate and only about twice as long as the flower or fruit, often curling over the top of it.” Thus it is confirmed; I have definitely been eating kochia.

In fact, I’m not sure I’ve even found *Bassia hyssopifolia*, though I recently saw a plant near the Great Sand Dunes in Alamosa County whose mature, dry tumbleweed forms and hairy young rosettes might potentially fit the bill. Taking into account the fact that the USDA range maps are incomplete—since kochia is not reported for my county but definitely exists here—Alamosa County is among just a handful of Colorado counties listed to have populations of five-hook bassia, which dominates California more than Colorado. Kochia, on the other hand, is shown to be much more widespread in Colorado. Some taxonomists put kochia in the genus *Bassia*, renaming it *Bassia scoparia*. This illustrates its close relationship to *Bassia hyssopifolia*, which is edible too.

Another tumbleweed, Russian

Kochia in flower. Note the spike-like flower heads and the long leaves subtending the flower clusters.





Kochias are Complex By WFG

Kochia scoparia is our most common kochia, Cattail Bob Seebeck explains (*Survival Plants*, 2012). However, the species is extremely variable, according to the *Flora of North America* (efloras.org). It is represented in Eurasia by several geographical races usually recognized as subspecies, among them a narrow-leaved form (*K. scoparia forma trichophylla*) known as “summer cypress” that is cultivated as an ornamental and sometimes escapes. This may explain why our local wild kochia, while having parts that turn red in fall, does not approach the fully fuchsia kochia cultivated in Japan.

Kochia scoparia is believed to have been

Cultivated kochia at Hitachi Seaside Park in Japan. The entire plant has turned scarlet. Is it a different variety than the wild species I have been eating? Or does it behave this way because it is under cultivation? Photo by Hiroki Saka, licensed for reuse under Creative Commons.

introduced to this country as an ornamental, but it has also been the subject of livestock forage studies, some of which recommend it to range managers—as long as the potential for nitrate toxicity is taken into account—because it grows well in arid regions. This use has earned it the name “alfalfa de los pobres,” or “poor man’s alfalfa.”

Thus one might speculate that different varieties of *Kochia scoparia* have been propagated in North America for various reasons, and that more than one



subspecies has escaped.

In Colorado, Weber & Wittmann reject the names *K. scoparia* and *B. scoparia*, using the name *Bassia sieversiana* for the abundant annual instead (*Colorado Flora*, 2012 ed.).

Complicating factors further, there is a related plant referred to by the common name “forage kochia” (*Kochia prostrata* syn. *Bassia prostrata*), which was released in 1984 to prevent erosion and provide livestock fodder in the Intermountain West. This plant is a semi-evergreen perennial that is supposedly even more drought-resistant than *K. scoparia*, and does not tumble on the wind to spread its seeds indiscriminately like the annuals. It is more bush-like in appearance and should not be easily confused with *K. scoparia*. I do not know if it is edible to humans.

In addition, New England hosts populations of the non-native hairy smotherweed (*Kochia hirsuta* syn. *Bassia hirsuta*), a fleshy-leaved plant that prefers saline habitats (USDA).

There are also native kochia shrubs, among them the perennials *Kochia americana* (syn. *B. americana*) in the West, and the more localized *Kochia californica* (syn. *B. californica*) in California and Nevada.

More flaming kochia spheres at Hitachi Seaside Park. Photo by Reginald Pentinio, licensed for reuse under Creative Commons. Photo has been cropped.



thistle (*Salsola* spp.), is sometimes named as a lookalike. The fleshy seedlings of this plant have much narrower leaves, which are edible. The leaves are wispy in appearance as the plant grows. Later, distinctive spines form. These are evident in the dry, spiny tumbleweeds it produces.

Cautions with Kochia

Kochia colonizes polluted ground and has been shown to bioaccumulate heavy metals, so it makes extra sense to steer clear of such areas when foraging for the table. Because it is considered a noxious weed, take care collecting it from public thoroughways that may have been sprayed with pesticides. Like spinach, kochia contains some saponins, and

Salsola, which is edible before it turns prickly, has been named a kochia lookalike. When it matures and dries out, the plant detaches and tumbles on the wind with other so-called tumbleweeds. Salsola tumbleweeds are prickly and not fun on bare feet.

Photo by Gregg Davis.

can accumulate nitrates. Thus it should be eaten in normal human quantities, not in bulk as if you were a cow. Green Deane furthermore suggests that if dietary restrictions cause you to avoid spinach, you should avoid kochia too.

The Challenge

For me, part of the fun in edible wild plants is the challenge of discovering how best to serve them in a way that will be palatable to all members of my household.

One recent success we've enjoyed has been wintercress (*Barbarea vulgaris*), an edible mustard which, for the longest time, I could barely choke down. Raw, stir-fried, or steamed, it didn't matter; the plant was simply too bitter to stomach. Then I learned from John Kallas' book, *Edible Wild Plants* (2010), that the trick is to boil wintercress briefly in an open pot. The bitterness boils away, leaving a vegetable that my friend and fellow wild foods writer Ellen Zachos described as "more delicious than broccoli rabe."

And so my journey with that abundant spinach cousin, *Kochia scoparia*, continues—because it certainly is plentiful, not only on the plains, but

here up high at 10,000 feet in the Colorado high country where I live. When I'm craving greens and very little else offers itself, faithful kochia is there at my doorstep. I think it is only right to appreciate the bounty it offers us.



And I didn't even have to sow this.





Land Caviar By WFG

Sushi rolls with wild ingredients, topped with "land caviar." Photo by Gregg Davis.

I almost didn't believe my first bite of wild-made tonburi—a preparation that involves boiling and soaking kochia seeds to make what is referred to as "land caviar." The green and black seeds swell to a gelatinous texture with a shiny finish, and the mouth feel is the simultaneously slippery and crunchy texture of caviar.

The flavor is quite nice too. Tonburi has been described as tasting of broccoli and artichoke, and can be seasoned to give it a caviar-like flavor. According to tonburi

purveyor BienManger, it is a specialty of the Akita prefecture in Japan and an ingredient in Buddhist vegetarian Shojin-ryori cuisine. It is often served seasoned with smoked fish or blended into a mayonnaise.

Truly, this is a wonderful ingredient—and with a little know-how and effort, we can access it for free. That's because kochia, a non-native and some say noxious weed, is very plentiful in regions west, and in localized areas around the world.



Getting the Seeds

While the young shoots of *Kochia scoparia* are edible, so too are the seeds, which can be collected from late summer well into fall. Kochia is often easy to spot at this stage because its stems turn bright red before the plant dries out and turns brown. In cultivated varieties, the entire foliage can appear red, such as in the magnificent display of cultivated kochia spheres at Hitachi Seaside Park in Japan.

Kochia's seed heads are spikes of tiny, ball-like fruits, subtended by a long, linear leaf that surpasses the length of the flowers many times over. They can be stripped into a collecting container easily. Since kochia tends to cover large areas and is a prolific seed producer, it can be quick work to gather a lot of the fruits and their tiny seeds.

I collected my first batch of kochia seeds last fall in the Denver area, from the urban edge of a prairie dog field where it proliferates. Then later in the season, here up

Kochia stems turn red in fall high up in Fairplay, Colorado. Soon it will be time to collect the seeds.



high at 10,000 feet in Fairplay where I live, I gathered more from the sidewalk next to the new elementary school. Then I spread the seed heads on a cookie sheet and let them dry out.

Making Tonburi

To make tonburi from the dried, wild-foraged seeds, I first dumped my material into a big bowl and rubbed it between my fingers for a while. This is easy to do while watching TV. The process loosens the chaff and seed coats from the seeds.

Winnowing the excess leaf material and dry fruit casings from the seeds proved problematic, since I normally do this by blowing into a bowl of material outdoors, but I didn't want to spread the invasive plant matter about. So instead I rubbed the seeds, sifted out the smallest bits of chaff through a sieve, then used Gregg's tap-

Dried seeds, leaves, and fuzzy seed head spikes, stripped from the dry plants.



the-cookie-sheet method to separate the rest. This involves spreading the material out at one end of the cookie sheet, tilting it slightly, and tapping from underneath or above so the seeds roll and bounce to the other end, leaving the chaff behind. It's an imperfect method because the chaff inadvertently slides down too, so every tenth tap or so you have slide all the material back to the upper end of the tray. I ended up with maybe 1/4 cup of seeds. It didn't look like a lot, but half that amount swelled up to at least 1/2 cup of finished tonburi, if not more. Some

Kochia seeds, dried and winnowed to remove the chaff.

chaff is likely to remain in the mix, but does not detract too much from the final product.

The next step was to boil the seeds until soft, which for me took about 10 minutes, and then plunge them right away into cold water and let them soak overnight. This produced the caviar-like, vegan tonburi, which should be rubbed and rinsed several times to remove the bitter, sometimes mildly irritating saponins.



Invasive Species-Made, Vegan Caviar

I used to buy caviar from Trader Joe's when I lived in California. Since then it seems to have increased in price, or I have just become poorer. In any case, I never purchase caviar anymore.

Black caviar from wild-caught sturgeon is a no-no on the Seafood Watch list from Monterey Bay Aquarium. "All 26 wild sturgeon species around the world are depleted or near extinction," they explain. "These fish grow slowly, mature late and can't keep up with the high demand for caviar." The group recommends opting for caviar farmed in the U.S. or Canada as a best choice.

The soaked seeds swelled to produce a pile of caviar many times the dry volume. The texture and crunch are similar to real caviar.

I stared at my invasive-species-made, vegan caviar in disbelief for a while. What would you make if a sudden bounty of almost-caviar landed in your lap?

Online searches produced some exciting ideas. I found an image of butter-poached Murray cod with baby radish, braised Japanese daikon, tonburi, and crystallized wakame; another of chilled oyster soba, champagne jelly, pickled cucumber, and tonburi. I drooled over lobster with fried ribbons of sweet potato, tonburi, and lobster sauce. And the list goes on.

Although many sites describe tonburi as a



A roll with cooked fish, avocado, wild plants, and tonburi. Photo by Gregg Davis.

gourmet delicacy, one commenter noted that according to Japanese-language websites, the seeds “only became ‘food’ after people in modern Akita prefecture were on the verge of starvation.” Whether delicacy, starvation food, or sustainable substitute for a depleted resource, I don’t care. The swollen kochia seeds are simply fantastic.

I used to make sushi on a regular basis back in the day in Los Angeles, where raw, sashimi-grade fish was easily obtained. Never had I topped my rolls with caviar, however, so I decided to have fun with rolls using tonburi instead.

Wild Sushi

I’ll admit my sushi rice was a bit of a disaster, since I didn’t have any short-grain rice, and there was just a smidge of rice vinegar in the cabinet. On top of that I seared the bottom of what little rice I was able to make. Still, it was good enough to fuel an obsessive day of roll-making with whatever ingredients I could find.

For the first round I did a couple rolls with avocado, tonburi, and the greens of a top-secret new wild edible whose identity I am not yet revealing, and another made with tuna salad because it was still in the fridge from our

road trip and I needed to use it. That was lunch, and it was awesome served with my new spicy peppergrass sauce in lieu of wasabi.

For the next round I steam-fried some white fish I found in the freezer, then flaked it into a pile and set about gathering other interesting ingredients.

From the back yard I plucked the young shoots of Canada thistle (*Cirsium arvense*), another pernicious invasive species, from the

It seems like I'm always pulling out Canada thistle, which is a pernicious weed at my house. Good thing I can repurpose the young shoots into a crunchy vegetable akin to bean sprouts. I clipped the leaves and used the white parts raw in some of the rolls.

soft, wet ground. The idea for this came from Erik Skokan, renowned farmer and chef of The Black Cat, a farm-to-table restaurant in Boulder, Colorado. He told me how he fries the young shoots. To the casual observer, these “shoots” look like roots because they come up from underground, where they attach to a lateral rhizome. They are blanched white and crunchy from growing underground, with a flavor and texture reminiscent of bean sprouts. I decided to include them raw, scrubbed and sliced lengthwise, in a few of the rolls.

Other ingredients included creamy wild onion dip leftover from the road trip, goat cheese, some errant strands of mallow I found mixed





***Top:** From time to time, I receive an email asking me to be on one of those survivalist TV shows. I wonder if survivalism involves making sushi rolls? **Left:** Dandelion Roll was one of Gregg's favorites. It uses yellow petal-packed, unopened dandelion buds along with goat cheese. Photo by Gregg Davis.*

in with my secret wild ingredient, unopened dandelion buds, young peppergrass rosettes (*Lepidium ramosissimum*), and even a dill pickle. I divided the fish into two piles and soaked one in homemade teriyaki sauce. This time, I flavored the tonburi with salt, vinegar, sugar, and sea lettuce flakes (*Ulva* sp.).

Making the rolls felt like painting a canvas, but with a fantastic palette of unusual wild ingredients. A creative door opened and I went to town. Later when I served the long plate of whimsical rolls, replete with wild garnishes,

Gregg stood gaping, incredulous at the spread I laid before him.

Our favorites were the Teriyaki Secret Roll, which contained teriyaki fish, the secret wild plant, and Canada thistle shoots with a tonburi garnish; Pickle Roll, with thin slivers of dill pickle, wild onion dip, spicy peppergrass rosettes, Canada thistle shoots, and tonburi; and Dandelion Roll, which had peppergrass, Canada thistle shoots, goat cheese, and thick dandelion buds quartered to reveal their tightly-packed, bright yellow petals.

Peppergrass Tonburi “Wasabi” Sauce

Real, fresh wasabi is made by grating the spicy rhizome of a Mustard family plant, *Eutrema japonicum*. Often, however, what you get in a restaurant is imitation wasabi made from horseradish, which is also a mustard.

We didn't have any wasabi, but wasabi is a mustard, and we did have a wild mustard growing in the back yard.

So I made a spicy sauce in lieu of wasabi using tiny peppergrass leaves and roots. Photo by Gregg Davis.





I did not have any wasabi or horseradish on hand, but I did have wild mustards growing in the back yard. Particularly plentiful is our local species of peppergrass, which is now in its young, spring rosette form. Spring is a good time to gather root vegetables because they tend to be softer before the plant transfers its energy to the above-ground parts. So I plucked a bunch of these peppergrass roots and attached rosette leaves to make my wild wasabi.

To prepare it I washed and finely chopped the roots and even spicier greens. These were small specimens; the largest had a pencil-thin root about 6 inches long, and small, lobed leaves that maxed out around 2 inches in length. I chopped them together along with pickled ginger, smidges of mayonnaise and sour cream, a splash of vinegar, and a few

*This is our back yard peppergrass, used for the mock wasabi. There are numerous species of peppergrass, including the relatively common "poor man's pepper" (*Lepidium virginicum*). Other wild mustards can be used as a horseradish or wasabi substitute, such as garlic mustard (*Alliaria petiolata*).*

spoonfuls of beautiful tonburi, which added a fantastic textural element to the sauce.

In place of saki I served a tiny cocktail of applesauce-flavored vodka and pickled-ginger juice; and in place of green tea I set out tiny cups of thick, hot chaga mushroom tea, its dark, balancing flavor like tree bark.

I was on such a tear that later I served some experimental desserts mixing goat cheese with stewed Japanese knotweed (*Fallopia japonica*); and set out a pumpkin black walnut bread so moist it is best served like bread

pudding with a sauce of melted butter and pine bark-infused spirit.

So, that was a lot of fun.

You Can Have This Much Fun Too

For me, collecting wild seeds is a meditative activity, as is the time spent winnowing and rubbing. The entire process feels quietly transformational—and all the more so with kochia seeds, which turn into such magical “land caviar.”

In Colorado and regions west, kochia is either sprouting or beginning to bolt now, so it’s a good time to look for the gray-green young shoots, take some pictures, and make a tentative ID. Then observe the marvel of

its branching growth to its mature, rounded-out form, when it will produce spikes of tiny, inconspicuous flowers followed by fruits and seeds. When the kochia turns red in fall and begins to dries out, go ahead and collect some seeds. Let them dry out fully; it takes but a minute to spread them on a tray, and you don’t have to use them right away. In fact, if you are still not certain of your ID, hold onto the seeds and watch the plant for one more season to make sure. The miracle can wait. But I promise—if you are willing to one day take the idea to fruition, there is a pot of gold at the end of this kochia rainbow.



To me the tonburi is as special as caviar, and I will honor it accordingly. Photo by Gregg Davis.



Wild Eats



Elderflower Champagne

By Ellen Zachos

I love the light bubbiness of elderflower champagne all on its own or mixed with a floral gin. If you can't find large flower clusters, use more, smaller clusters. I think it would be hard to use too many elderflowers.

Ingredients:

- 12 cups water
- 4 cups water
- 6-8 large clusters of elderflowers
- 1 1/2 pounds sugar
- 2 Tbsp cider vinegar
- 3 lemons

Instructions:

1. Bring 12 cups of water to a rolling boil in a large pot, then remove from heat and allow to cool to room temperature. In a saucepan, boil 4 cups of water, remove from heat, and dissolve the sugar in it. Pour the resulting syrup into a clean, non-reactive bucket (e.g. plastic or stainless steel; cast iron is reactive and shouldn't be used for this) and let it cool to room temperature.

Many people remove the flowers from the cymes, but a few flower stems is okay, especially if you're boiling them first. Photo by Ellen Zachos.





Fermenting elderflower champagne.

Photo by Ellen Zachos.

2. Slice the lemons very thin and add them to the cooled sugar syrup, along with the cooled 12 cups of water, the elderflowers, and vinegar. Stir it all up, drape a dish cloth over the bucket, and let it ferment without disturbing for four to five days in a warm spot. The top of the refrigerator is one of the warmest places in most homes and that's where I do this. It's okay to peek if you're curious. You'll notice little bubbles collecting on the floating solids as the brew ferments.
3. Collect four, 1-liter soda bottles, rinse and sterilize. To sterilize you can either use a commercial product like One-Step (if you're a home brewer) or bleach. Pour 2 teaspoons of bleach in each bottle, fill the bottle halfway with water, shake it around a lot, empty, and rinse.
4. After four days, strain the fermented liquid through wet muslin (or a jelly bag), then pour into the four sterilized bottles. It will be easier to fill the bottles with a funnel or from a pitcher with a good lip. Leave a few inches of air space at the top of each bottle and screw on the tops firmly. Squeeze the bottles to feel how much give there is in them and store them in a cool dark place (like in the cellar) for at least a week.
5. As the liquid ferments it produces carbon dioxide, which builds up pressure in the bottles and forces the gas to dissolve in the liquid. The pressurized gas will be released as champagne-like fizzy bubbles when

the bottle is opened. Check the bottles every day or so, gently squeezing on their sides. When they are rock hard (no give at all beneath your fingers) they're ready to be drunk. You can either move them to the refrigerator for immediate consumption (this beverage is best chilled) or keep them in the dark until you're ready. Elderflower champagne will keep for just a few months, so don't wait too long.

Please note: Pressure will continue to build as the bottles sit in your cellar, and here's where it gets tricky. One summer night I bolted awake, certain I'd heard a very loud noise. I confess, I often wake up thinking I've heard a very loud noise and most of the time I'm wrong. Finding no evidence of disaster, I chalked this one up to a dream state and went back to bed.

The next day I was looking for something down cellar and found a sharp shard of thick, white plastic on the floor. When I picked it up, I noticed that the floor was sticky. Light dawned and I checked my elderflower champagne bottles. Two of the four had exploded, bursting the plastic bottles and their white screw caps into pieces.

Since that fateful day, I leak a little gas from my elderflower champagne once a week. Not enough to let any foam out, but



Pressure will continue to build in the bottles as they sit. Off-gassing occasionally is a good way to prevent an explosion. Photo by Ellen Zachos.

just a crack so I can hear the gas escape for about three seconds. Then I tighten the cap and can once again feel a little give in the bottle. After a week the bottle is rock hard again and I repeat the process. Since I've started taking this precaution I've been explosion-free.



Elderflower Panna Cotta

By Ellen Zachos

A recipe for elderflower panna cotta caught my eye the other day and seemed the perfect, cool, smooth dessert for this time of year. I loved the idea of infusing cream with the delicate flavor and scent of elderflowers, and I'm a big fan of panna cotta. It's just sweet enough to feel like a real dessert, but light enough to be appetizing even when it's hot and muggy.

I noticed the recipe was different from other panna cottas I'd made, but I decided to stick with it anyway; perhaps I'd discover something new. I should have trusted my instincts. While I am grateful for the inspiration, the recipe left out several essential steps, and the proportions

of cream and milk weren't to my liking. The panna cotta separated and the texture was chalky. Fortunately, elderflower season lasts for several weeks and I was able to harvest another batch of flowers. This time I adapted my own, go-to panna cotta recipe and the texture and flavor were just right.

If you have a favorite panna cotta recipe, by all means use it, substituting the infused cream for regular cream. If you've never made panna cotta, here's a recipe that works well.

Another term for elderflowers is "elderblow." Photo by Ellen Zachos.



Ingredients:

- 2 cups elderflowers, removed from the stems (If a few of the individual, small flower stems slip past you, that's okay.)
- 2 1/2 cups heavy cream
- 1 1/2 cups whole milk
- 1 Tbsp unflavored gelatin powder
- 5 Tbsp sugar
- 2 Tbsp water

Instructions:

1. Stir together the elderflowers and cream, then refrigerate and let steep for 3-5 days. (Yes. You have to plan ahead.)
2. When steepage is complete and you're ready to begin cooking, sprinkle the gelatin on top of the water to let it bloom. It will be ready by the time you need it. Strain the cream, pressing the flowers to get out as much liquid as possible.
3. Combine the strained cream, milk, and sugar in a saucepan and bring it just to a simmer, then remove from the heat. Whisk in the bloomed gelatin until completely dissolved, and rub a little of the liquid between your fingers to make sure it's silky, not grainy.
4. Place the saucepan in an ice bath (shallow pot or pan with a combo of ice cubes and water) and whisk until the liquid is lukewarm. This step is essential.
5. Pour the liquid into mini-canning jars or ramekins and refrigerate until jiggly (4 hours or overnight). I used 4-ounce canning jars because I have a ton; they're cute, and I appreciate that each can be covered individually without using that infernal plastic wrap.



*Straining out the solid material.
Photos by Ellen Zachos.*

Elderflower Cordial & Buttermilk Sherbet *By Wendy Petty*

I suspect that the reason I'm not crazy about elderberries is that I've used them as medicine for so many years now, and associate their taste with being sick. Elderflowers, on the other hand, are a completely different matter. Their taste is so special, so magical, that I scramble to harvest and preserve enough to last the entire year during the brief period in which they bloom here.

Clearly, many covet the taste of elderflower. Why, then, do so many people mask their flavor when making elderflower cordial? Most recipes call for a mass of lemon zest and citric acid. I've even seen some that called for oranges, cinnamon, and clove. Worse, some recipes will have you dump boiling water overtop the delicate flowers, thus rendering them brown, and pulling out some of their off flavors.

Okay, so I'm opinionated when it comes to elderflower cordial. At least I'm not the only one. My friend at Wildness also holds strong opinions when it comes to elderflower cordial. I'd also like to add that this is not the time to use honey or unprocessed sugar. Both have strong flavors that will cover up the delicate pollen flavor of elderflower. Man up and use some white sugar. It's not as if you'll be drinking this stuff by the gallon. I used citric acid one time, and hated the way my elderflower cordial ended up tasting. I've not noticed a difference in the color or the way it preserved without the citric acid.

Once you've made elderflower cordial, you can mix it with fizzy water or alcohol to make a very nice drink. It is also a delightful way to



Photo by Wendy Petty.

dress cut fruit, or to soak a layer of cake. I had almost given up harvesting elderflowers for the year when my friend Lacy posted a recipe for elderflower sherbet made with buttermilk on my Facebook wall. I couldn't help but think that buttermilk and elderflower sounded like an amazing flavor combination, and I wasn't disappointed. It only took one bite to send me scrambling for more elderflowers, so that I'd be able to satisfy my desire to repeat the recipe. It's good stuff, and I think buttermilk sherbet has a lot of potential flavor combinations beyond just elderflower (lemon balm and peach, anyone?).

Butter's Elderflower Cordial

Ingredients:

- 4 cups stripped elderflowers
- 6 cups sugar syrup (ratio 1 cup sugar : 1 cup water, dissolved gently over heat) at baby bottle temperature
- 8 Tbsp lemon juice

Instructions:

1. Pick the elderflowers from the stems, but don't get all OCD about it, just do the best you can. I like to use my fingers, but plenty of people use scissors.
2. Pour the warm sugar syrup over the elderflowers, stir, and let sit for 24 hours.
3. Strain out the elderflowers using a sieve.
4. Stir in the lemon juice.
5. I can this using a water bath, but because that is a fussy process in which you could potentially harm yourself, I will say to just stick the cordial in the refrigerator unless you have experience canning.

Elderflower Buttermilk Sherbet

Ingredients:

- 2 cups buttermilk
- 3/4 cup milk
- 1 1/2 cups elderflower cordial

Instructions:

1. Whisk all ingredients together.
2. Pour the mix into your ice cream maker and follow the manufacturer's instructions.
3. Freeze the resulting elderflower sherbet, stirring every hour, until it sets as firmly as you desire.

Wild-Foraged Tonburi “Land Caviar” By WFG

Photo by Gregg Davis.

Ingredients:

Kochia scoparia seeds
Water

Instructions:

1. Collect the seeds of *Kochia scoparia* in fall when the plants have dried out by stripping seed heads into your collecting bag.
2. Spread the seeds and fruits out onto a cookie sheet and let them dry completely, until the leaf and fruit material is brittle when you rub it.
3. Pour the material into a bowl and rub it vigorously between your hands for a while, so that most of the black seeds are rubbed clean of their brown casings.
4. Sieve and winnow away the excess chaff.
5. Boil winnowed kochia seeds until soft, 10 minutes or so.
6. Plunge them into a bowl of cold water, cover with a towel, and let sit overnight.
7. Rub and rinse several times again, until few suds remain in the water.
8. Drain and serve as is, or brine with mirin, sugar, or date sugar for the sweet element, and salt, tamari, or seaweed flakes from a sheet of nori buzzed in a coffee grinder.
9. Serve with fish, atop sushi, or mixed into a mayonnaise-based sauce for added texture.



Seasoned Tonburi By WFG

Ingredients:

Tonburi, prepared in advance
Rice vinegar
Sugar or sweet mirin wine
Sea salt
Seaweed flakes

Instructions:

1. Just prior to serving, season tonburi with rice vinegar, sugar or sweet mirin wine, sea salt, and seaweed flakes to taste. We used wild-foraged sea lettuce for the seaweed.
2. Serve with fish, oysters, sashimi, or sushi. Or go a different route and serve like caviar atop crackers with bits of hard-boiled eggs, capers, and red onion.



For the seaweed I used New England-foraged sea lettuce (Ulva sp.), a transparent, green, cellophane-like seaweed that I collected and dried on a trip east last summer. There are many ways to go with this recipe.



Mock Wasabi Sauce with Wild Mustard

By WFG

I didn't have any wasabi in the house, but I did have a wild mustard growing in the back yard. Our local, many-branched species of peppergrass (*Lepidium ramosissimum*) is quite plentiful. I plucked whole rosettes of the tiny, spicy leaves. The long taproots came up easily from the wet-soft soil. Then I scrubbed off the dirt and chopped the leaves and roots into a bowl to make my spicy mock wasabi sauce.

Ingredients:

- 10-15 whole peppergrass rosettes, leaves and roots, scrubbed of dirt
- 1 dollop mayonnaise
- 1 dollop sour cream
- 1-4 tsp finely chopped, pickled ginger
- 1-4 tsp tonburi, prepared in advance
- 1 Tbsp vinegar (rice, white, malt, or red wine)



Instructions:

1. Chop peppergrass leaves and roots very fine, and combine with other ingredients.
2. Let sit a while so the flavors meld, then serve with sushi, game, sausages, or whatever suits your fancy.



