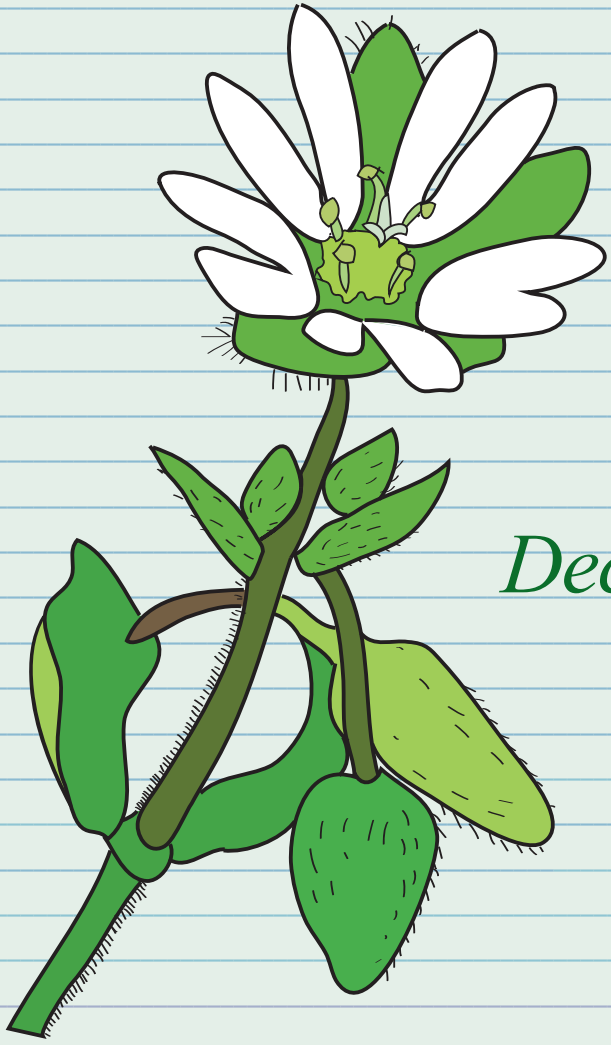
Wild

Edible NoteBook



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Wild
Edible NoteBook

Managing Editor & Content Writer:
Erica Marciniec Davis
aka WFG

Copy Editor:
Gregg Davis

Contributors:
Wendy Petty

Photography:
Gregg Davis
Wendy Petty

Info:
www.wildfoodgirl.com

Social Media:
Instagram: wild.food.girl
Facebook: 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.

Don't forget your orange duds when hiking during hunting season. Photo by Gregg Davis.

This month's edition takes a good look at wild fruit vinegars—from home-fermented vinegars to those flavored with the scraps of wild fruit jams, jellies, and sauces. Next we make friends with common chickweed, a plant that not only pops up in spring, but also in late fall and even during winter snowmelts in some regions. After that is a review of Katrina Blair's book, *The Wild Wisdom of Weeds*. There are recipes for fruit shrubs by the inimitable Butterpoweredbike of Hunger & Thirst, plus a few culinary ideas from yours truly.

2021 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.

This year, I decided to start reissuing 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) and Instagram (wild.food.girl), where I post regularly.

Sincerely,
—WFG

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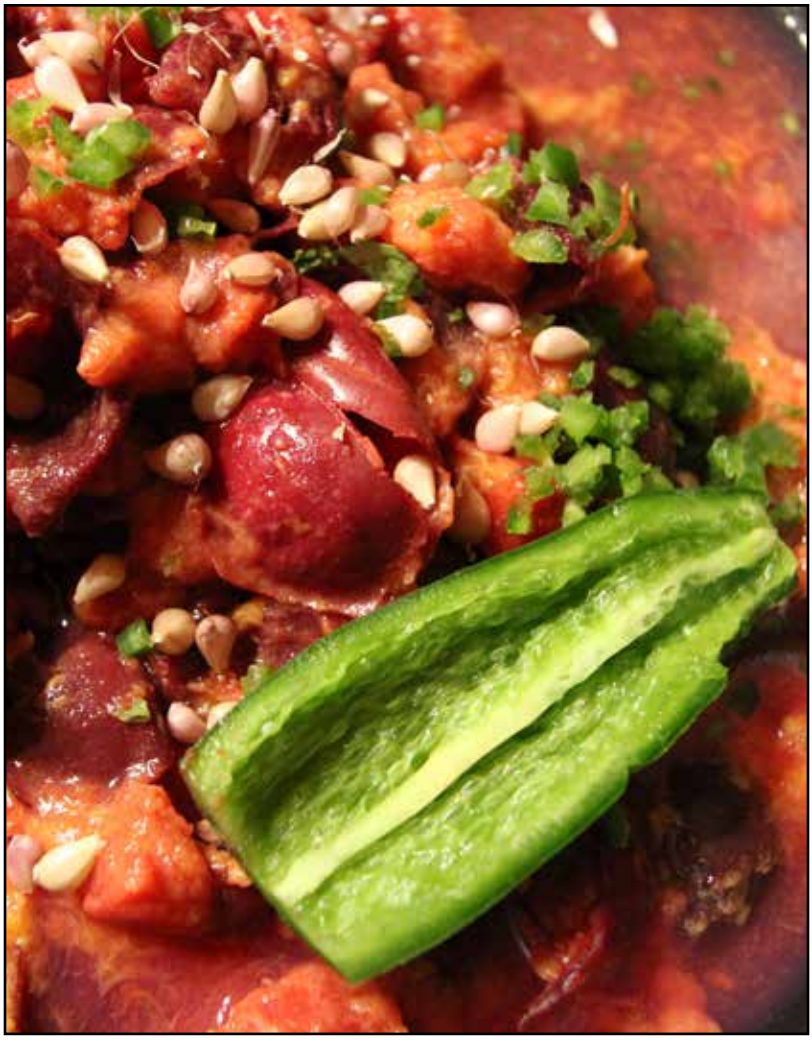

Wild plum sauce in the works. After the cooking was done and I'd run everything through the food mill, I used the leftover scraps to flavor a bottle of vinegar.

REVISED 12.14.21

While the author has prepared this Notebook to the best of her ability, users should take necessary precautions including referencing multiple guide books prior to consuming wild plants. The stories in this Notebook may not be applicable to your locale. Consult with a professional when appropriate. The author shall not be held accountable for what you choose to consume.

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erica@wildfoodgirl.com.

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Vinegar, Untamed *By WFG*

"It smells like rotten fruit in here," Gregg protested at the air, which was thick with the scent of various fermenting fruit concoctions. I had quite few going at once for a while there—chopped feral pears, apple cores, and fruit pulps soaking in light sugar syrup in various stages of fermentation, each in its own big jar. I am using no technical methods but instead the most basic of fermentation techniques, and it is delightful mad science.

For a while there I was happy to sip nightly on a young batch of hard pear juice, while ignoring another big jar of pear alcohol in the making. That other batch, hidden in the corner, did not stop at alcohol. Instead, it went all the way to vinegar. I must have been too tipsy to notice.

I made this wild vinegar by flavoring distilled vinegar with the scraps leftover from a batch of spicy wild plum sauce.

Chopped feral pears soaking in light sugar syrup in various stages of fermentation. I enjoyed one batch as an alcoholic beverage, and let the other go to vinegar.

Country Pear Brew

Vinegar is the product of two fermentation processes. The first happens when yeast changes sugars to ethanol, or drinkable alcohol. The second is when a group of airborne bacteria convert the ethanol to acetic acid, a main component of vinegar.

To make the hard pear alcohol, I used a very basic process that my friend Butter had been doing—peel, core, and chop ripe pears; throw them into a jar with light sugar syrup (I used approximately 1 cup sugar to 5 cups water); and wait a few days for it to start bubbling and fizzing. She topped hers with a canning flat while it was on the countertop, then capped it once she stuck it in the fridge, opening as needed to off-gas and thereby avoid an explosion. I did mine with a cloth napkin overtop.

Either way works, explains Sandor Ellix Katz

in *Wild Fermentation* (2003). "Alcoholic beverages produced using exclusively open fermentation vessels can be excellent, though they must be consumed quickly, as it is only a matter of time before they become vinegar," he writes. "Alcoholic beverages intended for aging are generally completed as closed ferments in an airlocked vessel."

To ferment with less risk of explosion or exposure to vinegar-making organisms, he recommends using a narrow-necked bottle along with an airlock, an inexpensive device available from home-brewing suppliers that prevents air from entering while allowing the carbon dioxide gas produced by the alcohol fermentation to escape. Alternatively, he says, you can use a balloon or even a condom stretched over the vessel's top, just as long as

Above & Below: *Oh good, it's still fizzing—a sign that the fruit-laden syrup is fermenting into drinkable alcohol, and producing carbon dioxide as a byproduct. Let some air get in when the fizzing slows or stops, and new bacteria will turn the brew to vinegar.*

At first I called it pear cider, but since I didn't press the pears, perhaps "brew" is a better term. In any case, I thoroughly enjoyed this fermented feral pear beverage.

you take it off occasionally to let the gasses escape. This is to prevent against the condom suddenly flying across the kitchen at your better half while he's cooking.

After about a week, when our pear brew had been bubbling for a while and the fermentation was well underway, we took out the fizzy pears and ate them, an alcoholic treat unto themselves, leaving the liquid on the counter to mature. When the bubbling slows and it smells like alcohol, you have alcohol. I found that if I let it go a little longer, the sweetness dissipated and the alcohol content increased. So you can let it mature awhile longer if you like, but be careful exposing it to air if you don't want vinegar, because this is when the vinegar-making organisms can turn your batch.

In this method, the yeast comes from the fruit's skin, often appearing as a fine dust or whitish coating. Even though I peeled the pears (which I probably didn't need to do), some yeast-bearing skin likely got in there, or the yeast on my fingers from cutting them, because I needed no additional yeast. This method makes what you might call a "country wine," with potentially variable results. It is among the many ferments described by Katz, whose book is a must-read for low-tech, would-be wild fermenters.

Alternatively, brewer's yeast can be added for ferments made from grains, cereals, and molasses, and wine yeasts are used for fruit juices and honey.

From my perspective, the country wine

method worked great, yielding a beverage I craved night after night. However, we had a houseguest at the time who went into all manner of tortured machinations—including doubling himself over at the window sill, dry heaving and announcing he had to vomit—after sniffing my foaming pear brew. "All that fruit and fermentation!" he cried. And then: "I had a bad experience once."

"Bad alcohol memories can be very strong," Gregg apologized.

More for me, I figured.

Feral Pear Vinegar

After you have alcohol, exposure to air is what allows the acetic acid bacteria to get in and change it to vinegar. Katz describes a thick blueberry wine vinegar his friend makes in a big oak barrel turned on its side to maximize the surface area exposed to air, which comes in through the cheesecloth-plugged bunghole.

"Acetobacters tend to be very temperature-sensitive,"

Can you see the thick, gelatinous mother-of-vinegar growing on the surface of the liquid? Though not required, its appearance is a good sign that your vinegar-making is proceeding successfully.

Here's a close-up of the mother. Mothers can range in color from transparent to dark. Go ahead, take a bite. Eating this stuff is supposed to be good for you.

write Aki Kamozawa and H. Alexander Talbot in *Popular Science* (2008). "They are happiest between 59 and 94 degrees (F), with an optimum range of 80 to 85 degrees for acetification."

I made my pear vinegar by accident, though conditions in my kitchen seem to have been ideal for it. The jar sat in a dark corner with a cloth overtop; I probably didn't strain the fruit out as soon as I should have; and I stirred it maybe once a week for a couple of weeks. Then one day I noticed it had developed a whitish, translucent layer of film on top. I almost threw it away, thinking it was mold. In fact, the film was a mother-of-vinegar or "mother" for short, similar to the colony of yeast and bacteria that grows on Gregg's kombucha. It's a good thing, something that can be transferred to future batches as a starter. "The mother is edible and nutritious, so there is no need to be afraid of it," Katz writes. To this day, however, I have yet to chomp down on a gelatinous mother myself.

"Fresh vinegar has a sharp, intense flavor," write Kamozawa and Talbot, who recommend straining and transferring finished vinegar to an airtight container and letting it age for at least

six months to mature the flavor.

But I was too impatient to wait. I turned the jar gently to the side so as not to disturb the mother too much, and extracted a lemon-yellow spoonful so Gregg could have the first taste. He puckered up something fierce but with a happy light in his eyes, and afterwards announced that he's a big fan of vinegar. I'll take it.

I haven't had much luck convincing my friends that vinegar soda is the best thing ever, but it's really nice with home-flavored or home-fermented fruit vinegars. Just splash them into seltzer or ice water for a refreshing, grown-up style drink. This one is flavored with black currant vinegar, made from leftover skins, seeds, and pulp soaked in distilled vinegar. Gregg says the black currant vinegar is for him alone and is not to be shared.

Vinegar as Tonic, Vinegar as Drink

Vinegar has a long shelf-life due to its acid content, and was therefore once a way to preserve fruits and berries for non-refrigerated storage, explains liquor historian Wayne Curtis, quoted in a *New York Times* piece by Robert Simonson (2011) about the rise in popularity of vinegar cocktails.

Creative bartenders are using the acetic acid in vinegar in place of the citric acid in limes or lemons to create artisanal drinks with a complex character, while the identity of the secret ingredient, vinegar, is disguised with en vogue terms like "shrub." The trend is a throwback dating to 18th century America. Colonists and homesteaders mixed their home-brewed vinegars with sugar and water to make a tart beverage, Curtis explains. They discovered it worked well as a mixer for hard alcohol too.

Vinegar was also thought

Here's my black currant vinegar in the works. It's super easy to make while cleaning up from a jelly project. Just stuff the leftover scraps into a jar, pour distilled vinegar overtop, and cap with a layer of plastic wrap under the flat so the metal does not corrode.

Feral pears, foraged from a neglected pear tree on Denver's outskirts. These sweet lovelies are now preserved in a flavorful pear vinegar.

of as an all-purpose tonic, useful for treating and preventing many ailments. The belief was not unfounded. Studies have found that vinegar has anti-tumor properties, and that it can aid in blood-glucose control for diabetics by reducing insulin response and blood sugar elevation when taken following a meal. It may reduce blood pressure and lower other risk factors for cardiovascular disease, and there is evidence for its effectiveness as a disinfectant for household applications.

For an easy-to-read, cited synopsis of vinegar's health benefits that links to the source documents, see "The Health Benefits of Vinegar: Real or Imagined?" by Sayer Ji at greenmedinfo.com.

I enjoy homemade vinegar splashed into seltzer or club soda. It makes for a refreshing, grown-up style beverage—think seltzer with a spritz of lemon or lime. Vinegar is even nice in plain old water, akin to squeezing lemon or lime into a tall, cool glass of ice water. You get a tart drink with just a hint of sweetness, depending on the vinegar, that is not only tasty without added sugar but good for you to boot.

If you want a sweeter drink, you can add sugar, honey, molasses, or other sweetener. I like to preserve the flavor of wild fruits and herbs in simple syrup (in a 1:1 sugar to

water ratio). If I'm in the mood for a sweeter beverage, I'll add one of my syrups made with rosehips, currants, pineappleweed, spruce tips, or other wild ingredient. My latest concoction is a syrup of foraged feral apples and crab apples, mmm.

But seriously. Vinegar and water, or vinegar and seltzer. If you haven't tried this already, give it a go straightaway with a good apple cider vinegar. You might be pleasantly surprised.

Bright Vinegar Waters

Bless Gregg's soul because when he likes something, he gets very enthusiastic about it. An ice water splashed with pear vinegar had him raising his eyebrows, tentatively delighted in the revelation of its bright flavor. He downed it pretty quickly. "I really think I like vinegar," he said, skipping to the kitchen to deposit the empty glass in the sink.

Later I remembered I had a jar of black currant scrap vinegar—which I'd made, not by fermentation, but by hurriedly packing the leftover skins, seeds, and pulp from a batch of black currant jelly into a mason jar with distilled white vinegar. I'd topped it like Butter showed me, with a layer of plastic wrap under the metal lid and ring so the vinegar wouldn't corrode them, and stuffed it into the fridge.

If there's a wild berry Gregg loves

Tips for Vinegar Ferments

- For the sugar syrup in his home-fermented pineapple scrap vinegar, Sandor Katz (2003) recommends using 1/4 cup sugar to a liter of water, a ratio that can be used as a general guideline for other ferments too.
- "A sugar concentration in the range of 10-18% is considered ideal for making vinegar stock," write Kamozawa and Talbot (2008). "This is because concentrations of alcohol at 9-12% are considered optimal for vinegar production." Because chlorine and fluoride in municipal water can adversely affect fermentation, they recommending filtering such water first. They also advise that "a clean, sterilized container for storing your vinegar during the fermentation process is a must."
- Once the home-fermented vinegar is finished, Katz says to jar, tightly cap, and store it at room temperature, where it will keep indefinitely.
- Although many sources recommend against pickling and canning with home-fermented vinegar for safety reasons, author Leda Meredith writes that there is a way—by using an acid titration kit, available from home winemaking suppliers, to test that your homemade vinegar is acidic enough to kill off harmful bacteria. "The number you need to remember is 4.5% acetic acid," she writes. "That is the percentage at which a vinegar is acidic enough to use in pickling recipes." Her instructions differ from those that come with winemaking kits. They are available online: "How to Safely Use Homemade Vinegar in Pickling," at www.thespruceeats.com.

most, it's our local trailing black currant (*Ribes laxiflorum*), so I splashed a few teaspoons of the fruit scrap vinegar into a pretty glass with water over ice, and served him the fuchsia libation as he sat reading in an old-timey cracked-leather armchair, warm in the spilled sunlight by a window in the corner of our little house.

"Mmmm," he said when he first tried it, and then when I passed back by the room a few minutes later, he effused loud enough for me to hear: "Delicious!"

I'll take that, too.

Flavoring Distilled Vinegar

Flavoring distilled vinegar is another fun way to get a yummy wild edible vinegar by reusing kitchen scraps without having to set up or monitor a home ferment.

The simplest instructions say to fill a sterilized jar with fruits, berries, herbs, or other infusing agent and top them with warmed vinegar, then let them sit at room temperature out of the sunlight for a week to three weeks. Some recipes call for sterilizing the jars and lids, and some do not call for sterilizing anything, instead just washing in hot, soapy water. Some call for refrigerated storage and others for storing in a cool, dark place. There seems to be some flexibility in how you

Wild plums foraged in late summer from Denver's Front Range. I look forward to enjoying their abundance during the cold months in the form of sauces, purees, and vinegars. The next time I score some wild plums, I will be making a lot more vinegar.

infuse vinegars—unlike oils, which carry the risk of deadly botulism if prepared improperly with fresh ingredients, particularly garlic.

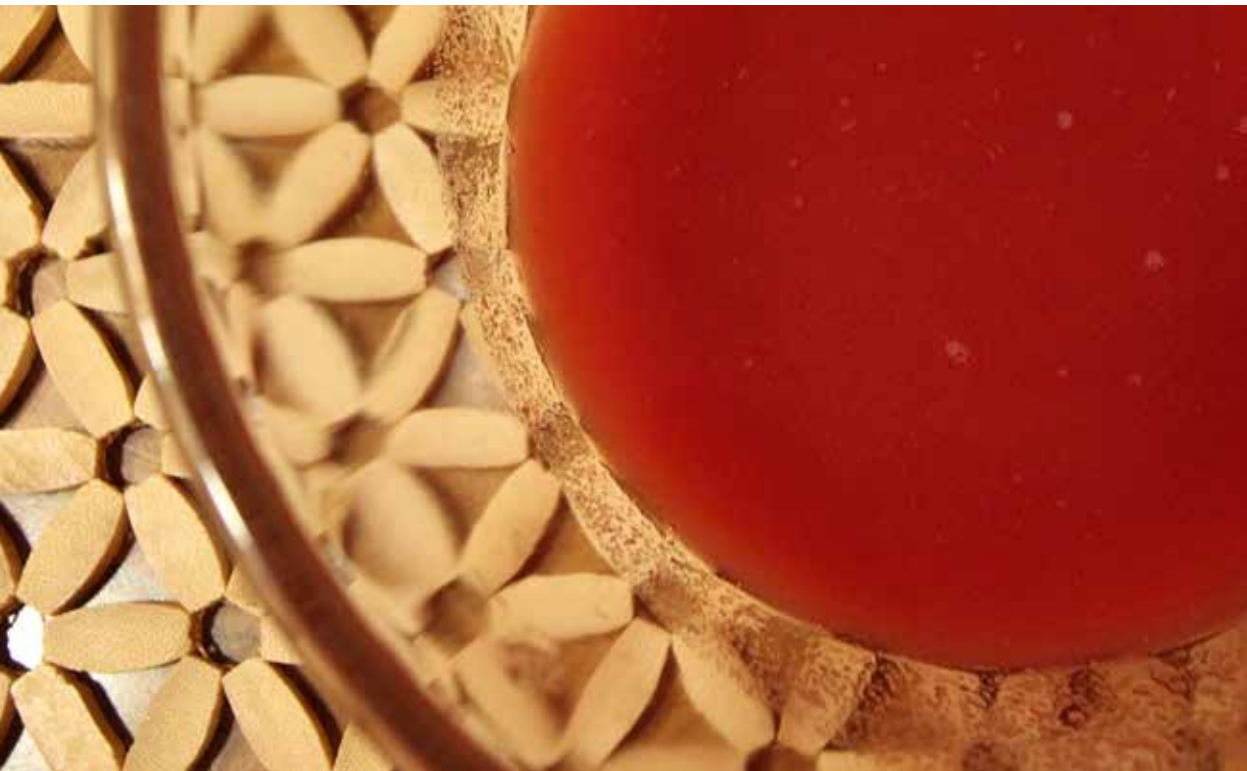
"Because vinegar is high in acid, it does not support the growth of *Clostridium botulinum* bacteria," explain P. Kendall and J. Rausch in a Colorado State University Extension office paper, available online. "However, some vinegars may support the growth of *Escherichia coli* bacteria." Thus sterilizing jars and lids, and bringing the vinegar to a simmer before pouring it over the flavoring ingredients, is probably not a bad idea.

To retain flavor, Kendall and Rausch recommend storing flavored vinegars for 2-3 months in a cool, dark place, or 6-8 months in the refrigerator. "If you notice any signs of mold or fermentation (such as bubbling, cloudiness, or sliminess) in your flavored vinegar," they write, "throw it away without tasting or using for any purpose."

As I was not trying to ferment my black currant vinegar, and because I wanted to store it for a while, I kept mine in the fridge, again using a layer of plastic to protect against the lid rusting. Mild vinegars like white wine vinegar come recommended for flavoring projects so as not to obscure the taste of the ingredients, but I use distilled vinegar. (Interestingly, a Wiki explains that "distilled vinegar" is actually a misnomer, because it is not made from a process of distillation, but from the fermentation of distilled alcohol.) The black currants have a strong flavor, so I didn't find the distilled vinegar problematic. When I was ready to use it, I strained it directly into Gregg's drink—and you saw how excited he got about it.

I made another flavored vinegar this year out of the leftover boiled fruit and vegetable

Spicy wild plum vinegar after straining.



scraps from a batch of spicy wild plum sauce. The ingredients included wild plums (*Prunus americana*), dried feral garlic bulblets (*Allium sativum*), salt, ginger powder, sugar, jalapeños, and splashes of soy sauce and rice vinegar. I simmered them together for a while and then ran them through the food mill to separate the sauce. The dregs from the food mill went into a bottle for vinegar. I let it marinate for a week or so on the countertop, then strained out the food matter and stored it in the fridge. So far we have enjoyed it mixed with good quality olive oil, Gregg's homemade baguettes dipped therein. I also splashed some into a batch of spicy tomatillo salsa for an added zing.

Vinegar Pie

Later I spent some time rooting around for recipes that would really highlight and honor my wild vinegars. Again, the ones that stood out for me dated back to a former era, and spoke to the ingenuity and resourcefulness of the early colonists, when foodstuffs were scarce or expensive.

I found a few intriguing recipes for something

Vinegar pie, vinegar pie! How I love vinegar pie! Don't worry, it's mostly custard, with just a hint of added tartness provided by a few spoonfuls of feral pear vinegar.

called vinegar pie—where, as in the cocktails, vinegar substitutes for lemon or lime juice. Whereas citrus fruits were often hard to come by, vinegar could be made at home from wild or cultivated fruits, or starches like cereals and grains (in which case the starch is first converted to sugar, then the sugar to alcohol, and finally the alcohol to vinegar).

I followed a recipe from versatilevinegars.org that calls for 4 eggs and 1.5 cups sugar, melted butter, vanilla, and a couple tablespoons of vinegar. Everything gets mixed together, plopped into a pie shell, and baked until firm for approximately 50 minutes. We went for about 70 minutes here at 10,000 feet. The filling never really got firm, but instead turned into a loose custard. The top layer firmed up, however, turning golden-brown and caramel-crispy. For the vinegar I used my home-fermented feral pear concoction. It leant a hint of tartness to the pie, though with so much sugar it was also very sweet. I served it with home-whipped cream and foraged black walnuts. Gregg declared it "delicious" and "extremely rich" and applauded it for being "a delicious pie without all the unnecessary fruit." Keeping in mind, however, that there were, in fact, pears hidden in that vinegar.

Messy vinegar pie topped with home-whipped cream and wild black walnuts. It's divinity on a plate, I swear!

"Vinegar pie has never been about 'wowing' company with a show-stopping dessert," Carissa Casey writes at prettyhungryblog.com. "It's just a down-home sweet that hits the spot even when the pantry is bare. I like that about it. When I eat it, I feel like Laura Ingalls. And when I make it, I feel like Ma—hard-working, resourceful, and grateful for every cup of sugar and every egg."

Casey shares her Grandma Lena's vinegar pie recipe, recorded in a recipe book when her grandmother was a young adult. The process for her grandmother's vinegar pie is quite a bit different from the one I followed. In hers, the ingredients—eggs, sugar, salt, vinegar, and flour—are poured into boiling water and cooked to thicken, then transferred to a pie shell and refrigerated. So there's flour added, and no baking involved.

Indeed, there seem to be quite a few variations on vinegar pie, each with its own regional flair.

In a piece on forgotten recipes at sandychatter.wordpress.com, Sandra Lee surveys the work of food historians and historic cookbooks to present several recipes for vinegar pie. Citing William Woys Weaver's book, *America Eats* (1989), she explains that vinegar pie is an adaptation of the baked lemon pudding by confectioner Elizabeth Goodfellow (1767-1851) of Philadelphia. That creation, now known as lemon meringue pie, was once a mark of luxury. "The vinegar pie reduces the lemons to a mere hint of grated zest and replaces them with vinegar," writes Lee. "The result is a pie that looks like lemon meringue pie but the taste is not the same."

To me, vinegar pie seems appropriate for our current era, when so many of us are doing our best to rely on thrift and resourcefulness in the face of dwindling resources. Vinegar made from repurposed scraps can offer an infinite variety of flavors. And maybe I'm crazy, but to me vinegar pie just sounds good. Chefs, home cooks, and novices alike, I hereby challenge you to a vinegar pie!

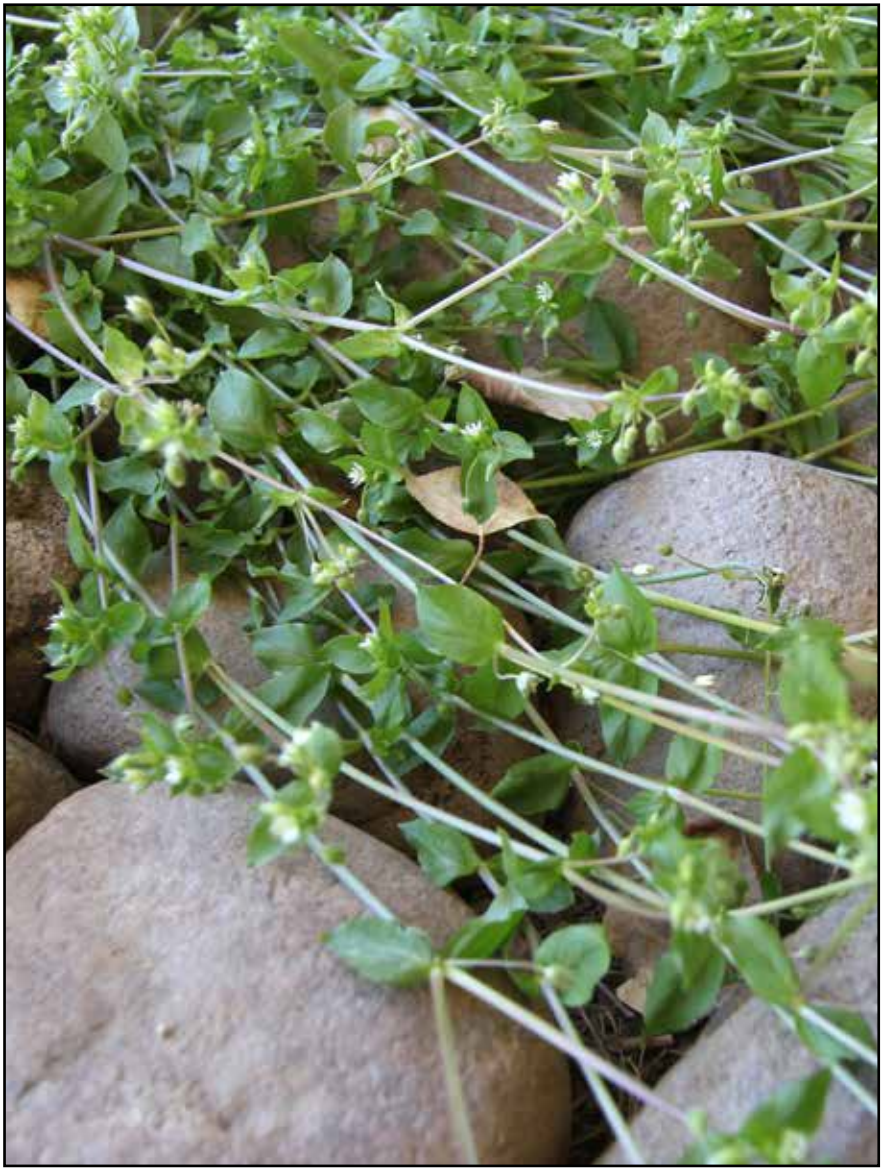
After that, we'll tackle Great-Great-Grandma's wild vinegar taffy.

■

Cosmopolitan Chickweed *By WFG*

I made a new plant friend in Breckenridge, Colorado this fall. It popped up during a thaw between our first real snow in late October, and the big snow that started the second week of November.

We'd gone in to secure our lockers at the ski mountain where we work, which by then is usually blanketed in white. Instead, the sun shone bright and warmed what was primarily dry ground, but for a few white patches leftover in shady spots from the earlier storm. We rounded a corner to find chickweed crawling lush across an area landscaped with chunky rocks in the lee of a building.



Common chickweed found sprawling across a landscaped area at Breckenridge Ski Resort during an early November thaw. Photo by Gregg Davis.

It was probably not the best place to forage

Have you ever given a cat a haircut? Use those skills to clip the tender new chickweed tips. Photo by Gregg Davis.

for edible wild plants, but I did it anyway. I was happy to grab a few handfuls of chickweed's sprawling strands, already missing the wild green abundance of warmer months.

In some regions, chickweed (*Stellaria media*) can be found all year long, Wildman Steve Brill writes (1994). It does well when the trees bear no leaves and there aren't other herbaceous plants around competing with it for sunlight, from late fall to early spring. "In late winter," he adds, "it's a blessing for victims of F.W.S. (Forager's Withdrawal Syndrome), who crave a wild salad."

For me it was barely the first week in November and already I was showing signs of F.W.S.

Chickweed Is

Common chickweed (*Stellaria media*) is distinctive from other plants in that it has a single line of hairs—like a mohawk, Kallas writes in *Edible Wild Plants* (2010)—along its thin stems. The line of hairs does not continue straight, instead rotating to a different side of the stem at the leaf nodes.

Common chickweed flowers are white, the five white petals so deeply cleft they look like 10 petals. The lower stem leaves are oval or ovate, with little light-colored pointy tips (Kallas, 2010) and smooth margins. They occur in opposite pairs on the stem.

It's a delicate plant that bruises easily, Katrina Blair writes in *The Wild Wisdom of Weeds* (2014), in which she dedicates a full chapter to chickweed as one of "13 essential plants for human survival" that can be found worldwide.

Chickweed is a sprawling, mat-forming plant of European origin that can grow in dense patches. It is a cosmopolitan weed, often

A distinguishing feature of common chickweed is the single line of hairs down the stem. At each joint, the line of hairs rotates to a new side of the stem.

Chickweed flowers are white. The five tiny petals are so deeply cleft they look like 10 petals, a characteristic that has earned them the nickname "mouse ears." Photo by Gregg Davis.

found in urban or landscaped areas.

Colorado taxonomists William A. Weber and Ronald C. Wittmann place common chickweed in a different genus (*Colorado Flora*, 2012 ed.). Instead of *Stellaria media*, they classify it as *Alsine media*.

The first time I found common chickweed in Colorado was in spring in a Fort Collins open space under a landscaped pine tree next to a parking lot. Chickweed thrives in soft, rich soil, preferring soils that are slightly acid, Kallas (2010) writes. While it can grow any time of year under the right conditions, he explains that it generally has a good growth spurt in spring, and a less impressive one later, in fall.

Chickweed is found "during the cool weather of spring," Florida forager Green Deane (eattheweeds.com) writes, "which in Florida is February."

A Little Bit of Pollution Won't Hurt You, Maybe

The Fort Collins park, unfortunately, did not seem like the best place to forage for food. There were rules prohibiting plant removal, first of all, and it seemed likely that in such a manicured and highly trafficked spot, not far from a patch of "invasive" plants evidencing the twisted and tortured effects of herbicide spray, that contamination by herbicides, automobile exhaust, river flooding, or excessive canine attention seemed likely. Also they were spraying the wetlands against mosquitos, though the young man with the liquid-filled backpack said the spray was organic.

Interestingly, the health-

These stems might appear delicate, but they make for some tough chewing. Consider field-tasting your chickweed to know just how far down the stem to harvest.

conscious Katrina Blair writes fondly of a chickweed bounty gifted to her by a student who discovered it growing under an air-conditioning unit. "The water dripping from above made the chickweed patch thrive there more than anywhere around town," she explains (2014).

To me this also sounds like a less-than-ideal location to forage.

But elsewhere in the book, Blair admits: "If I personally choose to harvest a plant that appears to be fully healthy and thriving but is found near a potentially toxic site such as mine tailings, commercial agriculture fields, septic waste areas, or fracking projects, I have found that they can be edible in small quantities. I evaluate each situation case by case and rely on my intuition."

I decided to include this point since my past stories have emphasized many times over the importance of foraging from clean locations. However, the fact of the matter is that we may not always have the option of collecting

Common chickweed can be found growing as a ground cover, "creating a beautiful airy tangled mass as it matures through the growing season," Katrina Blair writes in her book, The Wild Wisdom of Weeds. "It can handle very cold conditions," she adds, "and even flower under 10-20 inches of snow."

plants from pristine locations. Although there are plenty of good guidelines to follow for avoiding foraging from contaminated locations, ultimately we must make the decision for ourselves as to whether we should dig, for example, the feral parsnips growing huge next to the telephone pole at the corner of the commercial agriculture lot, as a friend of mine did once.

Heck, we eat pesticide-sprayed veggies every day. Or at least some of us do, because of the lower price tag.

Chickweed Isn't

A widely cited, and some sources say poisonous, lookalike to common chickweed is scarlet pimpernel (*Anagallis arvensis*). It is similar to chickweed in its sprawling nature, with jointed stems and small, opposite leaves at the nodes. However it can be distinguished from chickweed by its square stem and lack of prominent hairs, writes Kallas, who includes excellent photographs of common chickweed side-by-side with scarlet pimpernel in his chickweed chapter in *Edible Wild Plants* (2010).

Scarlet pimpernel flowers range from orange to red or blue, in contrast to those of chickweed, which are white. On the underside of scarlet pimpernel's leaves, there are dark spots. Scarlet pimpernel can be found growing intertwined with chickweed, Kallas writes, so it is important to learn to distinguish the two.

Scarlet pimpernel is considered a poisonous plant. This chickweed lookalike can be distinguished by its square stem and spots on the leaf undersides. Photo by Jack Picknell, licensed for reuse under Creative Commons.

Some poisonous spurges of the genus *Euphorbia* might also be mistaken for chickweed.

"Prostrate spurge (*Euphorbia supina*) and spotted spurge (*E. maculata*), which grow close to the ground and have opposite leaves, look a little like chickweed, and they can grow side by side with chickweed," writes Steve Brill. Rattlesnake weed (*Euphorbia albomarginata*) might also be mistaken for chickweed.

"Spurge, which contains diterpene esters, causes nausea, vomiting, and diarrhea when eaten, or redness,

Some spurges of the genus Euphorbia might be mistaken for chickweed, and spurges can make you sick. If the plant in question exudes a milky, white sap, it's not chickweed. Photo of spotted creeping spurge by Frank Mayfield, licensed for reuse under Creative Commons.

swelling, blisters after contact with the skin and exposure to sunlight," Brill states.

Indeed, a few years ago, a woman wrote to me that she had ingested what she thought was chickweed, and had been vomiting for the last hour. She decided not to go to the hospital, and later when she started to feel better, I asked her to examine the plant.

The plant she ate exuded a milky, white sap when she cut the stem—a characteristic of spurges but not chickweed—so I suspect the culprit was a spurge. Spurges also lack the line of hairs that distinguishes chickweed, Brill explains.

Other Chickweeds You Can Eat

There are other chickweeds that you can eat. Among them are star or giant chickweed (*Stellaria pubera*), a plant native to the eastern United States which also has lines of hairs on the stems and deeply cleft 5-petaled flowers, but the flowers are larger and showier than those of common chickweed.

Water chickweed (*Myosoton aquaticum*), an introduced species found on pond and brook

edges or shady, moist soil, bears similarly cleft white flowers, but the hairs on the upper stems are uniformly distributed, explained Samuel Thayer (personal communication). In some regions, it is more prolific than common chickweed and can be used similarly, he said.

Mouse-ear or field chickweeds of the genus *Cerastium* are less tender than *Stellaria* "but still very edible," Thomas J. Elpel writes in *Botany in a Day* (2013).

The leaves and stems are sturdy and hairy,

Mouse-ear chickweeds of the genus Cerastium are also edible. Gregg shot this photo in the Colorado high country last summer. Note the "mouse ear" petals.

Kallas writes of *Cerastium fontanum*, which he shows side-by-side with common chickweed and scarlet pimpernel in *Edible Wild Plants* (2010). The moniker "mouse-ear" comes from the deeply cleft white petals that look like a pair of mouse ears, a trait *Cerastium* shares with its relative *Stellaria*.

We have several mouse-ear chickweeds of the genus *Cerastium* here in Colorado, though I have yet to make much use of them. People seem to prefer the flavor of common chickweed over mouse-ear, with one commenter on the Permies forum writing that mouse-ear chickweed "tastes horrible."

I look forward to eating more of these horrible chickweeds next season and telling you all about it.

Chickweed Fur, As It Were

The patch of common chickweed I found in Breckenridge this fall disappeared under two feet of snow a week later, but I was lucky to make two visits to it beforehand.

The first time I collected from too far down the plant, ending up with lower stem bits, which can be tough and stringy. For this reason, Brill (1994) recommends pretending that chickweed is an unruly cat and giving it a haircut—by snipping off just the fresh, growing tips, or chickweed fur, as it were.

Kallas (2010) explains that chickweed is best foraged where it is growing in dense patches, such that the growing tips point straight up, making it easier to snip them off en

Don't these chickweed stems look yummy? Actually, they're quite tough. Your best bet is to juice them at this point.

Chickweed tips tossed with spicy wild plum sauce, sugar kelp flakes, and sesame seeds. I thought it made for a tasty salad, but Gregg giggled and said it tasted like cut grass.

masse. These bits can be used fresh in salad or cooked—though it's kind of a pity to cook them, he says, because they reduce in volume so much when you do so.

Many folks liken the flavor of chickweed to corn silk. The tips are green, delicately crunchy, and nice, and not very much like cat fur at all.

The patch I found in Breckenridge was a prostrate one. Still, the second time I visited it I put in the effort to snip the tips properly. I got a few cups of greens, enough to toss into a couple of recipes. Since I wanted to eat them raw and I wasn't sure if it was a spot that dogs like to frequent, I soaked them first in a vinegar-and-water bath to disinfect them.

I tossed some of the chickweed tips with spicy wild plum sauce (*Prunus americana*), east-coast-harvested sugar kelp flakes (*Saccharina latissima*), and sunflower seeds to make a first course in a playful pan-Asian meal one night. Gregg took a bite and giggled, and when I pressed him he replied that it tasted like fresh-cut grass.

Well, I liked it, in any case. I really do enjoy the fresh flavor and crunch of chickweed.

For the next course I stuffed some more chickweed into water-softened rice paper shells and folded them into spring rolls to serve dipped in spicy plum sauce, but then had the idea to fry them up. I think it was the wrong kind of dough for that, because they melted tougher into translucent weirdness more than they seared, but I did like how the chickweed came out gently cooked and wilted and dark green.

My original batch of leaves, replete with stringy stem bits, did not go to waste either,

On a whim I fried up the spring rolls, but it turned out to be the wrong dough for the purpose. Still, I liked how the chickweed wilted and turned dark green. These were nice dipped in spicy wild plum sauce.

thanks to the ingenuity of Katrina Blair. Blair is an advocate of daily green juices, made from blended or chopped greens mixed with a healthy amount of water. Her mother suffered from arthritis and Blair credits daily green juices for helping her to return to a state of health. "She stabilized her condition and eliminated her pain by shifting her diet to a high level of living foods, including sprouts and green juices,' she writes.

In her Chickweed Cucumber Cooler, Blair suggests blending 1 cup fresh chickweed, 1 cucumber, 1 apple, a sprig of fresh mint, and 4 cups of water; straining out the pulp; and sipping "on this elixir with some deep full breaths of appreciation."

The recipe sounded good to me, but I had neither cucumber nor fresh wild mint on hand.

I blended the tough lower stem bits of common chickweed with an apple and diluted it with water to make this refreshing cooler.

Instead I pureed the chickweed plant parts with water and an apple and drank it as juice. The simple addition of a few cups of water changed the tiresome green smoothies I'd been trying to feed myself into a lighter and more refreshing beverage.

I enjoyed the flavor and also the fact that I could make use of the less tender portions of chickweed, but I suppose if it's good for me too then that's a bonus. Plus I could probably stand to squeeze a few more "full breaths of appreciation" into each day.

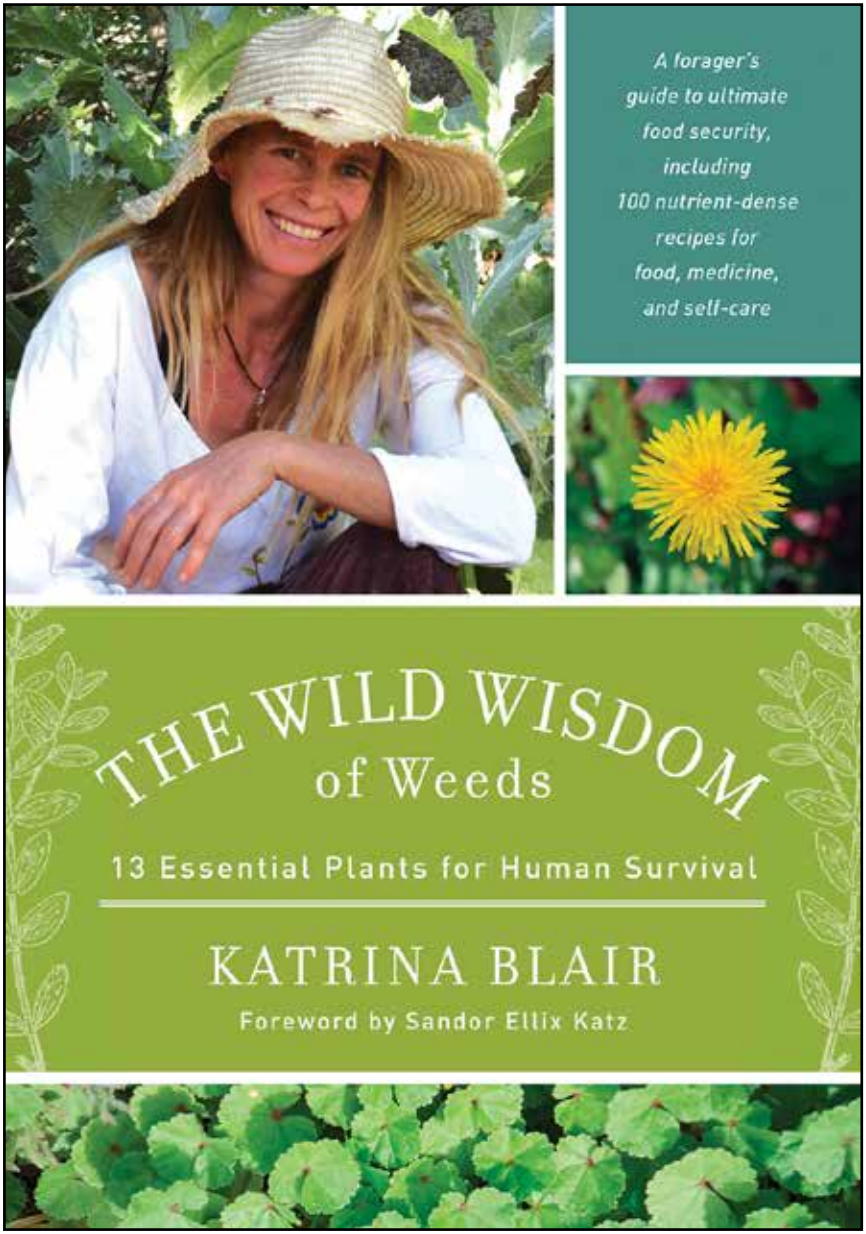
■

You Are What You Eat

Katrina Blair's Wild Wisdom of Weeds *By WFG*

Perhaps the hot springs had something to do with it, but when I sat down to review Katrina Blair's latest book, *The Wild Wisdom of Weeds: 13 Essential Plants for Human Survival* (Chelsea Green Publishing, 2014), I found myself enjoying a sort of inner peace.

The book features chapters on 13 edible, medicinal, and useful plants, found worldwide, that are widely considered "weeds." These include amaranth, chickweed, clover, dandelion, dock, grass, knotweed, lambsquarter, mallow, mustard, plantain, purslane, and thistle. Blair travels abroad often to speak on wild plants, and she chose the 13 because she runs into them regularly in her travels.



She considers them to be "essential plants for human survival," not from a survivalist perspective, but because they are abundant, free to harvest, and readily available to people around the world. Also, she writes that these plants contain "exceptional nutrient density," and "offer a host of attributes that provide simple solutions to many of the basic requirements that we need to live in a prime state of health." The book teaches how to make use of the 13 plants for food, medicine, and even self-care products like lotions and shampoo.

A lifelong lover of plants, Blair earned a graduate degree in holistic health education from John F. Kennedy University in California. In 2009 she published a book of wild, raw, and living foods recipes entitled *Local Wild Life: Turtle Lake Refuge Recipes for Living Deep*.

The knotweed chapter centers on prostrate knotweed (Polygonum aviculare), rather than the similarly named edible invasive, Japanese knotweed (Polygonum cuspidatum). Be careful not to confuse prostrate knotweed, which is edible, with prostrate spurge, which is not.

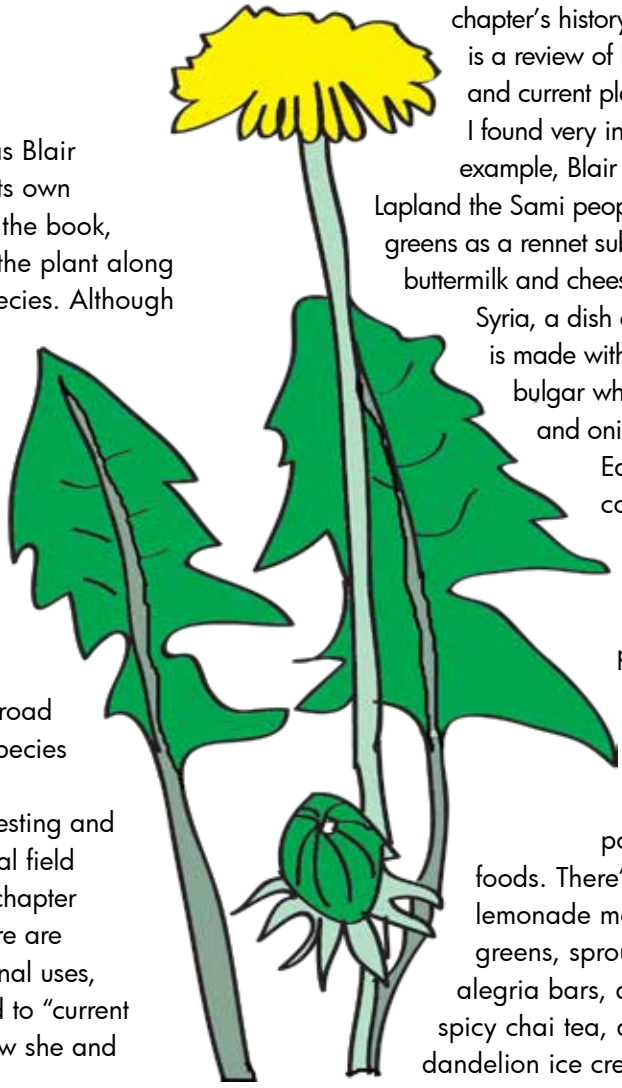
In *The Wild Wisdom of Weeds* (2014), she takes her ideas a step further, promoting a way of life while delving deep into the 13 featured plants. She encourages self-reliance by having us utilize the local abundance around us, and describes the book as "a journey about remembering our identity, rooted in the wisdom of our indigenous ancestors, while living in today's modern civilization."

The Wild Weeds

Each of the "wild weeds," as Blair refers to them, is featured in its own chapter in the second part of the book, starting with a description of the plant along with a list of related useful species. Although she gives species-level scientific names for each, she includes broader, genus-level and in some cases family-level, discussions of related plants in her accounts. For example, the "Mustard" chapter is headed with the binomial *Brassica juncea*, but the chapter itself includes a broad discussion of many mustard species and genera.

The plant accounts are interesting and more in-depth than a traditional field guide allows, since an entire chapter is dedicated to each one. There are sections on edible and medicinal uses, and another section dedicated to "current uses" in which Blair relates how she and the folks at Turtle Lake Refuge make use of the plant. Her accounts speak to many years of first-hand experience working with these plants, and are bolstered by research cited by chapter in the reference list. Foraging suggestions and cautions are included where appropriate.

A major theme of the book is global plant use, so she includes a list of global names for each of the featured plants. In each chapter's history section, there is a review of both historical and current plant uses that I found very interesting. For example, Blair writes how in Lapland the Sami people use dock greens as a rennet substitute to make buttermilk and cheese, and how in Syria, a dish called khebbese is made with mallow greens, bulgar wheat, olive oil, and onions.



Each chapter concludes with recipes, many of which are for raw food preparations, in keeping with the author's belief in the nutritional power of living foods. There's thistle lemonade made with thistle greens, sprouted amaranth alegria bars, dandelion spicy chai tea, and even a dandelion ice cream made with

Author and forager Katrina Blair.
Photo by Cheryl Foley.

dandelion greens, avocados, lemon, water, and honey. I thought the amaranth almond root stew, made with amaranth roots and "mallow almond milk" along with miso, dulse, and vegetables sounded interesting. Many of the recipes for crackers, breads, or snack bars are done in the dehydrator or under the sun instead of the oven, and make use of freshly sprouted, cultivated ingredients combined with wild foods. I'm not much of a raw foodie myself so the recipes surprised me—which is great, because I am always on the lookout for new ways to prepare wild foods. There are more than 100 recipes in all.

In addition, Blair offers detailed instructions on how to make healthy green powders from

dehydrated greens that can be added to winter meals and smoothies, explaining that we can replace store-bought vitamins and minerals with those gleaned from wild plants. "The 13 wild weeds covered in this book offer the optimal mineral supplements for our body's health because of their ability to draw minerals from the ground with their deep taproots," she writes. To that end, she includes a wild weeds supplement chart indicating which of the 13 plants are best for calcium, vitamin E, antidepressants, and omega-3's, to name a few, as well as a plant-by-plant discussion of properties and proportions.

What Turtles Do

The Colorado-based Blair is a pacifist and a lover of all living things. She is an adventurer who makes lengthy high altitude journeys on foot without food, water, or filtration device, feasting not only on the land but on gratitude—a story she relates in the Wild Intelligence chapter. She is an advocate of deep ecology and permaculture. The one time I attended a wild food hike with her, she conducted it barefoot, her long golden hair flowing, a bright smile on her face.

While the second part of the book is dedicated to the 13 plants, the first part is unlike many plant guides in that it centers on the author's story and worldview, and contains a spiritual or philosophical bent.

We learn how Blair and friends started Turtle Lake Refuge in 1998 while working to preserve 60 acres of local wetlands, raising awareness by serving locally grown, wild, and "living food" lunches. Now, the group has a town location in Durango, where two days a week they serve lunches featuring locally grown, wild-harvested, and living foods. There is also an organic community farm at Turtle Lake Refuge, a 2-acre plot located 4 miles outside of town, where in addition to cultivated crops the "Turtles" harvest wild plants when they are in season.

"I consider myself a farmer of the wild garden," Blair writes. "I consciously choose to garden in harmony with the wild plants. The wild weeds tend to spring up first and are at their optimum eating window when it is time to weed them for dinner." Thus the "wild weeds" are presented to readers, not in isolation, but as members of a larger community of plants that the group makes use of for healthy, living foods. As a result, the story is part farm log, for it tells not only of wild plants, but of a way of life that incorporates both wild and homegrown, living raw foods into a lifestyle.

Community Activism

The first part of the book also features a retelling of community activism projects undertaken by Blair and her group, including a lengthy battle for herbicide and pesticide-free parks in Durango. It began with the formation of the "Dandelion Brigade," a group that would harvest dandelions organically for homeowners, and afterwards make dandelion lemonade using a bicycle-powered blender, sharing the lemonade around in the hopes of engendering love for the much maligned plant.

Letters to local newspapers followed, along with presentations at city council meetings. This led to the creation of two chemical-free parks. Next, the group gathered signatures for a ballot initiative, which ultimately led to the passage

of an ordinance to create an organic land management plan for all Durango public spaces.

"As a beekeeper and a lover of life, I find it of critical importance that we make the necessary changes immediately to start creating an ecosystem that will sustain pollinator immune systems!" she writes.

Even as she fights to change her town's practices, however, Blair practices "unconditional love" with her neighbors who spray herbicides for a living. "Encouraging tolerance for all life is an important state of mind to cultivate within our community and ourselves," she explains.

A Lover of Invasive Species

This love for living things extends to so-called "invasive weeds," a term she argues is unfairly pejorative. Discovering the 13 plants around the world, in proximity to human settlement, affirmed for her that they belonged there. "They were not deserving of the derogatory names often given to

So-called invasive weeds, like this Scotch thistle (Onopordum acanthium), do not deserve to be sprayed with herbicides, Blair opines.

them such as 'invasive,' 'non-native,' 'aliens,' 'noxious,' and 'aggressive invader species,'" she writes. "I hope to shift the perspective that views them as the bane of society—thereby justifying their eradication. They belong on this planet just as much as everyone else does and require the same attitude of tolerance that we are cultivating for all beings in our attempt toward world peace."

She believes that the concept of "invasive" is flawed, since it depends on an "arbitrary decision of timing" regarding when a particular species arrived in a region. "It is important to remember that 'native' habitat only represents a moment in time," she writes, expressing concern that our efforts to control non-native species with petrochemical herbicides do more harm than good. "The weeds themselves are actually filled with light, the sun's light that has been transformed into green chlorophyll," she writes. But there is also a dark side—"how they are discriminated against as a life-form in some circles of our civilization."

Instead Blair encourages acceptance that nature is doing what nature needs to do, and that the "wild weeds" are part of that. "The secret of life in Taoist perspective is to return to the 'primitive chaos-order' of the Tao," she writes. "The wild weeds are examples of nature's creative edge. They lead the way of the new frontier that is constantly forming."

Embracing the Magic

As might be expected from the title, there's an element of magic to *The Wild Wisdom of Weeds*, starting with the creation myth the author penned for the preface. In it, the Great Spider laments how humans have drifted away from wild plants, but later sings songs of elation when they rediscover the wild abundance around them. There are also poems, wild plant raps, and whimsical drawings throughout.

In one chapter, Blair shares instructions for a biodynamic weed remedy to use in case we absolutely must get rid of our weeds—for example, if it is required by a homeowners' association. The remedy, based on the homeopathic principle of "like cures like," involves burning weed seeds and shaking the resultant ash with water a specific number of times, ideally on the waxing moon or in the moon of Leo, before applying it to the ground.

Elements such as these provide a window into the author's worldview—a spiritual orientation or belief system that, although she clearly states we need not adopt, permeates the book. Whereas the plant accounts are organized around first-hand information and research, other aspects might make science-minded readers uncomfortable. And yet, the living food, love-all-creatures, celebrate-wild-abundance lifestyle Blair exemplifies might intrigue others. So I suppose it depends on your orientation.

As for me, I love eating wild plants. I'm not sure whether or not, when I ingest their "primal essence of life," I feel the "deeper sense of wholeness, confidence and self-reliance," that Blair talks about in *The Wild Wisdom of Weeds*. But I like the idea that self-reliance, and connection with the natural world, can be strengthened by making use of the natural resources around us. I'm even inclined to like the notion that when we eat wild plants, "our vibrational spin increases

Strawberry Park Hot Springs, above Steamboat Springs, Colorado. Photo by Gregg Davis.

in steadiness and speed, inspiring a life of simple happiness and clarity." So maybe that's why I was feeling so happy and peaceful that day I sat at Strawberry Park Hot Springs reading the book.

No matter where you stand on science and religion, however, there is plenty to be gleaned from *The Wild Wisdom of Weeds* about 13 of the world's most common useful plants—those which can be found growing in proximity to human settlement worldwide, and perhaps even at your doorstep.

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Wild Eats

Vinegar-Splashed Squash *By WFG*

Acorn squash baked with butter and brown sugar is a holiday tradition in our household. In recent years I've enjoyed splashing a bit of orange juice overtop to lend a citrusy tang. This time, in the spirit of substituting citric acid with wild-fermented acetic acid, I splashed a spoonful of strong feral pear vinegar over each piece of Colorado-grown squash. I was worried it might be too much vinegar, but the squash received some nice compliments at our Thanksgiving table. Next time, I think more vinegar is in order.

Ingredients:

Acorn squash, cleaned and quartered
Butter
Brown sugar
Feral pear vinegar
Chopped black walnuts (optional)

Instructions:

1. Carefully quarter the acorn squashes with a sharp knife. Scrape out the seeds and pulp with a spoon. (Save the seeds to prepare like pumpkin seeds, if you like). Score squash with a knife.
2. Lay the squash in a baking pan and drizzle with butter, brown sugar, and fruit vinegar, repeating several times throughout the baking process. I used vinegar made from feral pears, but any speciality fruit vinegar should make for an interesting twist.
3. Bake at 400 degrees (F) for about an hour, until squash is soft through when you poke it with a fork.
4. Optional: Include crumbled wild black walnuts in your butter-and-sugar mix.

Fruit & Flower Shrubs: Don't Fear the Vinegar

By Wendy Petty, hungerandthirstforlife.blogspot.com

Photo by Wendy Petty.

I surveyed my cupboards and came up with nine different bottles of vinegar. I covet pickles, and take my meals with an obscene amount of mustard. I suspect it is safe to say that I am a fan of vinegar's sour pop.

But I know that not everyone feels the same. That makes it difficult when I try to sell people on the concept of shrubs, which are fruit or herb infused syrups that have been punched up with a heavy dose of vinegar.

When freshly brewed, shrubs possess a strong taste of vinegar. However, they are magical potions, and vinegar is the key to their amazing taste. With time, all of a shrub's harsh vinegar edges round out and meld with the syrup to make the perfect hybrid of sweet and sour. Shrubs can make for a sophisticated pantry staple, especially for people who find jams and syrups to be too sweet.

Serve them with seltzer for a mocktail, or seltzer and something harder for a more grown-up drink. If you must use your shrub right away, try it to dress fresh fruit or as a glaze on meat.

The basic recipe for a shrub is one part fruit, one part sugar, one part vinegar. By weight or volume, you ask? I say, don't sweat the details. Eyeball it, no biggie. You can play around with the basic template for making shrubs using whatever fruit and herbs are booming in your area. I think you'll be very pleased with the result.

Elderflower Rhubarb Shrub

Ingredients:

3 cups chopped rhubarb
1 cup stripped elderflowers (try to get most of the flowers off the stems)
A pinch of salt
2 cups sugar
2 cups water
Juice from 1/2 lemon
White, apple cider, or white wine vinegar

Instructions:

1. Place the chopped rhubarb, elderflowers, and salt into a large glass bowl.
2. Combine the sugar and water in a medium pan over medium-high heat. Once the syrup comes to a boil, turn off the heat.
3. Pour the hot sugar syrup over the rhubarb and elderflowers. Let sit from 12-24 hours.
4. Strain out the solids (they make a nice topping for ice cream and cheesecake). Measure how much elderflower rhubarb syrup you have, and add half that amount of vinegar. For example, if you ended up with 5 cups of syrup, add 2 1/2 cups of vinegar.
5. Finally, stir in the lemon juice.
6. Store in mason jars in the refrigerator, or can the elderflower rhubarb shrub in a water bath if you prefer to store it in the pantry. Shrub is best enjoyed after it ages for at least 6 months.

If it's not the season flor elderflowers where you live, use these recipes as a template to create your own shrubs. This account pertains to black or blue elderberries of the genus Sambucus, but not the red high country elderberry (Sambucus racemosa and related), though its flowers are edible too. Do not confuse elderflowers with poison hemlock. See Thayer (2010) for a good account.

Elderflower Lychee* Shrub

Photo by Wendy Petty.

Ingredients:

4-5 cups stripped elderflowers
2 cups sugar
2 cups water
Juice from one 16-ounce can of lychees
White, apple cider, or white wine vinegar

Instructions:

1. Place the elderflowers in a large glass bowl.
2. Combine the sugar, lychee juice, and water in a medium pan over medium-high heat. Once the syrup comes to a boil, turn off the heat.
3. Pour the hot sugar syrup over the elderflowers. Let sit from 12-24 hours.
4. Strain out the solids. Measure how much elderflower syrup you have, and add half that amount of vinegar.
5. Store in mason jars in the refrigerator, or can the elderflower shrub in a water bath if you prefer to store it in the pantry. Shrub is best enjoyed after it ages for at least 6 months.

**This recipe came about simply because I shared a can of lychees with a friend and didn't want to throw out the juice. If you don't have lychee juice, substitute the juice from one lemon, and you will have a gorgeous plain elderflower shrub.*

Strawberry Wild Rose Shrub

Ingredients:

Strawberries
Wild rose heads
Vinegar

Instructions:

1. Start by slicing your strawberries and placing them into a large bowl. With clean hands, reach in and squish the heck out of them.
2. Combine the strawberries with an equal part of sugar, stir, and let sit in a cool place for a day. Then strain out the fruit bits (and save to use as a refrigerator jam, or as a topping for cheesecake).
3. In the meantime, gently heat up some vinegar to baby-bottle temperature. Pour over either fresh or dried (preferably wild) roses. No need to use just petals here, steep the whole heads. Let infuse for a day, then strain out the rose bits.
4. Combine the juice from the berries with an equal amount of rose-infused vinegar (or a bit less to taste). You should taste a strong kick of tartness, followed by the sweet of fruit, and finishing with an aftertaste of the rose. All of these flavors will continue to meld and become more complex with time, and your patience will definitely be rewarded.

Dried Apple & Rosehip Tea *By WFG*

It was a good year for apples in Colorado's Front Range. There were many varieties of free, organic, "feral" apples to be foraged from abandoned trees leftover from the area's homesteading past, now all but forgotten in the city's tangled spaces. I came home with pounds upon pounds of apples, and one of the ways I put them up for long-term storage was to dry tray upon tray of apple slices.

I don't know why it didn't occur to me before, but the dried apples make a lovely and simple tea that is both sweet and tart with no sugar added. If you don't have feral apples, you can of course use store-bought apples instead.

Ingredients:

Dried apple slices
Dried rosehips
Hot water

Instructions:

1. Bring water to a boil.
2. Pour hot water over a small handful of dried apple slices and rosehips in a cup.
3. Cover with a small plate and let steep for 5 minutes, then drink up!