# Wild

## Edible NoteBook

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

*Fall is fast upon us.*
*Photo by Gregg Davis.*

This month, we celebrate fall by digging up dandelions to get at the roots of these common but underappreciated vegetables. Dandelion greens are perhaps better known, but there is plenty you can do with the roots too. Next, we tackle the invasive Canada thistle problem in my backyard by—you guessed it—eating our way through it. Then I report out on the Edible Invasives breakout session of which I was a part at the Sustainable Food Summit held this year in Boulder, Colorado. The November 2014 edition wraps up with recipes for roasted chicory root coffee and granita—which you can use with chicory or dandelion roots—by Wendy Petty, and a story about dandelion root kimchi by Tim Furst.

## 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

# Contents:



*Worldwide there are about 60 species of dandelions, including roughly 9 native and introduced species in North America, Elpel explains (2014). This beautiful native is the horned dandelion Taraxacum ceratophorum.*

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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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# Homage to the Humble Dandelion Root *By WFG*

We don't always get the best root vegetables here in the high reaches of the Colorado Rockies where I live. Often, the soil is rocky and firm—not the best conditions for a juicy, substantial root to thrive. This is why I appreciate good dandelion roots so much when I find them.

Mind you, if you try to dig dandelion taproots from firm, rocky soil, you are likely to get tough, sinewy vegetables scarred from doing battle to find their place in the ground. Such veggies make for a chewy mouthful, if they can be chewed at all.

But if you are weeding a garden planted in good soil, which has not been sprayed with chemical herbicides or otherwise polluted, and the dandelions sport thick,

*I dug up a nice double-header from some soft, deep soil in my backyard. Then I washed it thoroughly and chopped up the root for a crock pot dish.*

*Even dandelion stems are edible, but they are best when they're soft and green, in the bud stage before flowering.*

healthy taproots—that is food in the hand, my friend. You ought to eat it. Heck, if you don't want your dandelion roots, I'll eat them for you.

Much of the wild edible literature concentrates on dandelion greens, which certainly have their merits. Even at their bitterest, I enjoy them finely chopped in fish or pasta salads. They are nice balanced with sweet vegetables like grated carrots, or chopped and marinated with onions and soy for a fresh, cold salad. Dandelion leaf pesto, dandelion noodles, dandelion greens wilted in bacon fat, linguine with mussels and dandelion greens—you name it, there's a recipe for it. Dandelion flower heads are popular too, in deep-fried dandy fritters or better yet, dandelion wine.

## Dandelion Root Coffee

Dandelion roots, on the other hand, are best known for dandelion coffee—a non-caffeinated, healthy hot beverage made by roasting, grinding, and brewing the

*I dug these blanched dandelions from the mud at the base of a receding snowbank in spring.*

taproots. It was a popular hot drink among the American colonists, Connie and Arnold Krockmal explain in their 1974 cookbook, and there are groups that sell it commercially.

Euell Gibbons describes a lengthy process in *Stalking the Wild Asparagus*: "The roots are roasted slowly in an oven until they will break with a snap and appear very dark brown inside. This roasting will take about four hours. These roots are then ground and used just as one uses coffee, except that you need slightly less of the dandelion root to make a brew of the same strength. Drink it with or without sugar and cream, just as you take your coffee." Other recipes call for shorter roasting times. I usually roast mine at 325 degrees F for 45 minutes.

*Boiled whole dandelion roots and attached greens, served with a crock pot dish of pork, cabbage, and feral apples.*

*First, a bite of potatoey root, next a nibble of buttered-and-salted bitter greens. Not a bad combo at all.*

"I prefer it over coffee," writes foraging author Samuel Thayer (*Nature's Garden*, 2010), "and I suspect that if dandelion were endowed with caffeine and coffee was deprived of this stimulant, the world would drink billions of dollars' worth of dandelion and the coffee tree would be an unknown component of African highland flora."

## Not if I Eat Them First

Less well-known is the fact that dandelion taproots are nice boiled or roasted and eaten as a vegetable. The first time I boiled a good batch of whole, plump dandelion roots, buttered and salted and sat down to eat them, I was surprised at how good they were. Concerned they would be tough, I'd made sure to boil them for a while, at least 20 minutes. However, they did not come out the least bit tough after all. In fact, the texture softened up so much as to make them quite palatable. The bigger roots had a hint of bitterness, but not in an unpleasant way. I finished them with the eagerness that any high country forager starved for readily available, large, tasty sources of wild starch would.

Dandelion roots appear as food in the wild

*Dandelion roots, cleaned and ready to be chopped and roasted with other root veggies.*

*Above is a good dandelion root bit I got from the dandy pictured below. Tougher, woody pieces went into the pile to be chopped and dried, roasted and ground for dandelion coffee.*

edible literature, so I am surprised they are not more popular. The Krockmals' cookbook recommends a simple sauté in margarine with paprika after scraping, slicing, and boiling for 20 minutes. They are best in spring and fall, during root season, while the plants' energy is concentrated underground.

Thayer writes of boiling and serving dandelion roots with butter and salt (2010), so that's probably where I got the idea. Wildman Steve Brill (1994) likes to use olive oil for the root sauté, and suggests tossing them into soups. "Although not as tasty as many other wild root vegetables, it is not bad," he writes.

"I've eaten roots that were potatoey in texture, and the bitterness was manageable.

*I dug for dandelion roots using a number of implements, including a digging stick (right) that a student made for me. I broke quite a few roots, but still got plenty for my dish. Likely the bits I left in the ground will regrow.*

I've eaten others that were woody, and there was no way around the bitterness," writes John Kallas in E*dible Wild Plants* (2010), though he admits to having less experience with the roots than other parts.

"Cleaned, chopped, and boiled dandelion roots make a passable meal, especially by survival standards," write Thomas J. Elpel and Kris Reed in their book, *Foraging the Mountain West* (2014). Not exactly a ringing endorsement, but they do point out "it can be one of the more efficient root crops to gather."

Dandelions are a good food for both survivalists and preppers to know—whether foraged from the "wilderness" near old roads, the side of well-trodden trails, or urban settings. Their roots furnish a starchy vegetable, and their leaves are packed with nutrients. Early settlers

*I dug a long, unbroken dandelion taproot. My neighbor's cat, Boots, was unimpressed, but he did hang out with me the whole time I was digging those dandelions.*

brought dandelions to North America for food and medicine. War prisoners stayed alive by eating them to supplement meager rations.

"In my opinion, these white roots furnish a better vegetable than either parsnips or salsify," Euell Gibbons writes of dandelion roots, mirroring my own fondness for them.

## Weeding for Dandelions' Sake

Before writing this I perused the many devices available online for pulling dandelions. Despite the fact that they carry murderous monikers like "Dandelion Killer," there really is a good selection of tools for the purpose. Years ago, I spent hours pulling dandelions from my sister's carefully kept Minnesota lawn with a long-handled tool that looked like a post-digger, which you insert into the soil around the dandelion, twist and pull. Roots of surprising length came up. If only I'd known then what I know now, and boiled them up for dinner!

I have a long metal dandelion weeder with a forked end that I have used successfully to dig dandy roots, though for my most recent dig I primarily used a shovel. The taproots are long and skinny like carrots. At the top, they sometimes branch into multiple crowns.

Some folks prefer to scrub and peel dandelion roots with a peeler, but I've just been spray washing them, scrubbing them a little, and cutting away tough spots or areas that look like they could have dirt stuck in them. Then I instruct my better half to "bite carefully" in case of grit. What can I say? Grit happens.

Older roots can get woody and tough, so Thayer (2010) recommends going for the taproots of big, young dandelions if you plan to eat them as a vegetable. These are found "only under the best growing conditions,"

such as in crop fields and gardens. Since dandelions are perennials, he notes, young ones are difficult to tell from old ones until you dig them up. Fortunately, you can use the woody ones for dandelion coffee.

Kallas (2010) explains that the leafier a dandelion, the larger the root. "Unless the top of the plant is damaged," he writes, "leaf growth is generally proportional in size to the root size."

My favorite way to get dandelion roots is from a friendly gardener who's just finished digging them up, just so long as chemical herbicides or pesticides are not used on the soil.

Some foragers have concerns about eating roots grown in nitrate-rich, heavily fertilized soil due to the possibility of nitrate toxicity. Some plants, including curly dock, purslane, miner's lettuce, and wild spinach, are nitrate

*Long, lovely dandelion taproot close-up.*

*How many people feel blessed to have a yard covered in dandelions? I certainly do. There's a lot of dinner here.*

accumulators (Kallas, 2010). However, Kallas makes the argument that nitrate toxicity is not a risk for healthy individuals over four months of age in the context of a normal, diverse diet (*Edible Wild Plants*, 2010). There have been rare cases of nitrate poisonings of infants who ingested high nitrate spinach in the form of pureed baby food, he writes, because their digestive tracts are not yet mature enough to process the nitrates the way adults do. So you probably don't want to puree dandelion roots grown in high nitrate soil and feed them to baby, but you could probably eat dandelion roots grown in fertilized soil and be okay.

As for me, I am more concerned with other aspects of location. I try to stay 10 feet or more from big roads, and dig roots from soil that is not littered with garbage, or reclaimed from a coal factory, for example. Of all plant parts, roots in particular can accumulate contaminants, explains Rebecca Lerner (*Dandelion Hunter*, 2013), citing studies that have shown the highest concentrations of contaminants in roots and leaves, compared to reproductive structures.

In *Foraging & Feastin*g (2013), Dina Falconi explains how she will not forage for food next to buildings, from which toxic

# On the Hunt for Native Dandelions

If there's one plant that nearly everyone can identify, it's a dandelion—or so you would think.

The common dandelion (*Taraxacum offinale*), believed to have been brought to North America by early colonists, bears distinctive, yellow composite flower heads made up of numerous small ray florets. The flower heads are on single, unbranching, leafless, hollow stalks, and there are often multiple flower stalks per plant. Dandelion leaves can vary in form from deep to shallow-lobed. The lobes point backward toward the base of the stem or outward, and sometimes there appear to be no lobes at all. If you cut a dandelion stem, leaf, or root, the plant exudes a white, milky latex. When dandelions go to seed, they produce distinctive feathery orbs of winged seeds.

Some botanists recognize the red-seeded dandelion (*Taraxacum laevigatum*) as a separate species. Also considered non-native, it is similar in appearance to *T. officinale*, though it has—you guessed it—red instead of brown seeds in the middle of the fluffy seedheads. The red-seeded dandelion is edible in all the same ways as common dandelion.

Dandelions do have lookalikes, however, especially before they flower. John Kallas

*Wait, is that a dandelion? No, it is a close relative, Agoseris glauca. Photo by Gregg Davis.*

lists cat's ear (*Hypochaeris radicata*) and chicory (*Cichorium intybus*)—both edible plants—as lookalikes based on leaf shape, and includes helpful side-by-side photographs in his book, *Edible Wild Plants* (2010). Thayer notes that the wild lettuces (*Lactuca spp.*), also edible, look remarkably like dandelions in their young, rosette forms, but points out that all can be readily told apart based on distinguishing features. See *Nature's Garden* (2010) for his key to the lettuce-dandelion group.

Other plants produce dandelion-like flower heads, such as sow thistle (*Sonchus spp.*), which too is edible. However, sow thistle flower stalks branch into multiple flower heads, whereas those of dandelion do not.

In the western half of the U.S. we also have "false dandelions" of the genus *Agoseris*. *Agoseris glauca*, a native species, produces yellow, dandelion-like flower heads on unbranching stalks. The flowers and leaves of *Agoseris* species, too, are edible.

## Native Dandelions—Who Knew?

You might be surprised to learn that a number of dandelions are native to North America, and not weedy invaders at all.

The Rocky Mountains are home to the horned dandelion (*Taraxacum ceratophorum*), and Weber and Wittmann (2012 ed.) list other species, including *T. scopulorum* and *T. ovinum,* for Colorado's alpine tundra.

There is some disagreement about the classification of the various alpine and subalpine dandelions of the genus *Taraxacum*, with lumpers lumping them together and splitters splitting them apart into separate species or subspecies. These subalpine and alpine species of *Taraxacum* are also edible, with uses similar to the common dandelion.

One part of Colorado is home to a rare species of *Krigia*, sometimes referred to as "potato dandelion," and we also have a false prairie dandelion of the genus *Nothocalais*.

I swear, there is enough to study on this subject of dandelion-like *Asteraceae* to boggle the mind. I guess that's why they are sometimes referred to as DYC's—Damn Yellow Composites!

*Agoseris or native Taraxacum? You tell me.*

substances in pressure-treated lumber, paint, and asphalt shingles, for example, can leach into soil and contaminate it.

But all things considered, if you do happen upon your friendly neighborhood organic gardener, don't be shy. Most likely you'll get a bemused look as I have from every gardener I've ever interrupted to ask: "Excuse me, do you need these dandelions for any reason, or can I have them?"

## Making Use of Dandies at Home

There are good areas of soil where dandelions proliferate around our new house in Fairplay, Colorado. I transplanted rhubarb to one of them, first digging up a bunch of dandelions to ready the soil. We have taken to boiling our weeded dandelions whole, the greens still attached to the taproots. It makes for a nice contrast to alternate bites between tender, starchy roots and bitter greens, which I find myself craving.

We made a crock pot of pork, cabbage, and foraged feral apples, and I served it with boiled whole dandelions. As I was heating up the pork for a second night, Gregg peeked over my shoulder to ask if we'd also be having boiled whole dandelions with it.

There are subtle and not-so-subtle ways to judge the quality of a meal from my better half's perspective, even though he almost

*Dandelion roots, cleaned and prepped and ready for the oven.*

*Mixed root hash browns, uncooked. The roots that are round in cross section with a darkish center are dandelions. The amorphous ones with a clean white center are sunchokes, and there are potato cubes mixed in too.*

always insists he likes what I make. I know better than to let him catch me trying to figure him out. One thing I know for certain, however—if he asks for the same wild food a second night, it means he seriously likes it.

Lately he has been hashing up schemes to construct a deep bed of soil in the backyard to grow dandelions. So it may happen yet—I may become a dandelion farmer after all.

## Cool Stuff to Do with Dandelion Roots

If you've never eaten dandelion roots before, start simple. See if you have what it takes to dig, clean, and inspect a handful of them, to distinguish the good veggies from the crunchy old ones and get rid of unwanted dirt.

Definitely try boiling and eating tender dandelion roots with butter and salt, either chopped into pieces or whole, as I like them. You might find you stop there and serve dandy roots that way every time.

Consider tasting a sliver of juicy dandelion

*Roasted root hash browns, an egg, and a shot of Canada thistle, pear, apple, and lime juice.*

root raw. If you like it enough, chop some raw roots into small bits to throw over a salad or greens wilted in bacon fat.

Keep in mind, however, that many roots are rich in the indigestible starch inulin, which can give you gas, especially if you eat them raw or undercooked. "Inulin can be broken down into digestible sugars by prolonged cooking," writes Thayer (2006), who recommends cooking roots thoroughly, especially in the fall root season.

Kallas (2010) warns that dandelion roots, like the leaves, can be slightly laxative. Dandelions are also diuretic.

In the kitchen, dandelion taproots are comparable to other underground vegetables, so I think pretty much anything you do with a potato, turnip, carrot, or parsnip, you can do with a dandelion root, as long as the flavor fits your dish. The dandelion roots I've tasted ranged from the slightest bit bitter to quite mild in flavor.

One morning I endeavored a mixed root hash to go with a breakfast of eggs over-easy. The mix included dandelion roots, store-bought potatoes, and Jerusalem artichokes. Cubed, tossed in olive oil with salt and pepper, and roasted at 400 degrees F for slightly less than an hour, my

*This all-veg dish contains finely chopped, raw dandelion roots in a stir fry with feral garlic bulblets, ginger, salsify buds, chopped dandelion greens, and pre-cooked bulgur wheat, finished with splashes of soy sauce and sweet mirin wine. I sauteed the dandelion root bits first, hoping they'd lend a nice texture to the dish. They did.*

mixed-root hash browns turned out fantastic. I liked the variation on traditional potato hash browns so much that I caught myself fishing out dandelion roots and Jerusalem artichoke chunks, savoring those while leaving the potatoes behind. Gregg likened the dandelions to roasted chestnuts for their savory flavor, and because they came out firm on the outside and soft and chewy on the inside.

For dinner another night, I sautéed finely chopped dandelion roots with ginger and feral garlic (*Allium sativum*) bulblets, pre-cooked bulgur wheat, chopped dandy greens, and salsify buds (*Tragopogon dubius*). The root bits added a nice texture to

*It was a good year for dandelions near Heeney, CO. Photo by Gregg Davis.*

a yummy, impromptu stir fry.

There are authors who sing dandelions' praises, and others who lament those songs on the grounds that dandelions—the greens in particular—are bitter, and thus likely to disappoint new foragers. It's true, it takes some culinary know-how to pick greens at the right stage and prepare them well, and the roots require effort to dig and clean.

But such is the case with many wild foods—there is "work" involved, from the time spent outdoors foraging, to the cleaning and prep, to experimenting with recipes in the kitchen. The results may not be stellar the first time around, or they might. But you put in the so-called "work" for the joy of it, for the chance at experiencing unique and wonderful new flavors, and for the health benefits. Hopefully in the process youll rediscover that hidden gem in your backyard.

■

# Eating Through the Invasive Canada Thistle Patch —*WFG*

I stared at the Canada thistle in my yard for several weeks before deciding what to do with it. There were patches growing up between the garage and the house, and several more that had already flowered in the backyard. In Colorado, as in many other states, Canada thistle (*Cirsium arvense* syn. *Breea arvensis*) is considered a harmful noxious weed.

Canada thistle is similar to other "true" thistles of the genus *Cirsium* in that it has irregularly lobed leaves with spines at the lobe tips and elsewhere on the margins. The leaves are borne alternately and are lighter and slightly woolly on the underside. The stem leaves are smaller than the basal rosette leaves, and they lack a petiole or leaf stem, attaching

*A big patch of Canada thistle, a persistant invasive species, rose up to greet me in my new backyard. Photo by Gregg Davis.*

*The mature plants branch to produce multiple flower heads, which can be pinkish or purple or occasionally white. Photo by Gregg Davis.*

directly to the central stem instead. Near the top of the flowering stalk, the mature plants branch to produce multiple flower heads.

Canada thistle's flower heads are pink or purple—or on rare occasions, white, according to *Thistles of Colorado* by the Larimer County Weed District. They can be distinguished from many thistles based on that fact that the flower heads—specifically the involucral bracts on the swelling below the flowers—are spineless.

Other thistles on Colorado's noxious weed list include bull thistle (*Cirsium vulgare*), musk thistle (*Carduus nutans*), plumeless thistle (*Carduus acanthoides*) and Scotch thistle (*Onopordum acanthium* and *O. tauricum*). These are biennials, whereas Canada thistle is a perennial. There are also a quite a few native thistles in Colorado that are not invasive, and are instead a natural part of the landscape.

## All the More Reason to Eat It

Plants are usually classified as noxious if they are non-native species that aggressively invade habitats, causing ecological harm or economic damage to lands used for crops or livestock. Colorado has a three-tiered noxious weed list, where List A plants are the worst offenders and List C are the least, plus a Watch List for other plants that are starting to make an appearance here. For most of the listed plants, there is a downloadable information sheet with recommended management methods, from herbicides to mechanical removal.

Canada thistle is a native of southeast Eurasia, introduced to Canada as a

*A Canada thistle patch in need of attention. Photo by Gregg Davis.*

contaminant of crop seed as early as the late 18th century (*Weeds of the West*, 2004 ed.). It has an extensive root system and reproduces by both seed and rhizome, making it difficult to control. "Breaking up the roots by plowing only serves to increase the number of plants," the authors write. "What appear to be new seedlings are usually new shoots arising from extensive creeping root systems."

As a List B species, Canada thistle is required to be eradicated, contained, or suppressed in Colorado, depending on local infestations. That's fine with me, because I'd love to see other species flourish on my property instead. But I am going for containment, since I refuse to use chemical herbicides on our property unless the situation gets out of hand.

To contain my backyard Canada thistle population, I plan to pull the plants out as often as I find them, even though the State's handout indicates that "due to the extensive root system, hand-pulling this plant is not a viable option." Little do they know how small my lot is, nor how voracious my appetite.

*What look like roots are actually underground stem portions that shoot up from lateral rhizomes. Photo by Gregg Davis.*

## Thistles Are Edible

Like many other thistles of the genus *Cirsium,* the nodding thistle *Carduus nutans*, and a number of other so-called thistles to which this account does not pertain, Canada thistle is edible. Thistles are related to artichokes, which is why their flower buds look similar. Some parts taste a bit like artichokes, including the tiny sliver of flesh on the inside of the flower bud (if you take the time to boil and peel one) as well as the crown and root (which is best from biennials that have not put up a flower stalk). The leaf blades are edible, if you remove or

*A few years ago I boiled and peeled a couple different varieties of unopened thistle flower buds like artichokes. In the top picture, you can see the tiny sliver of "artichoke" heart. It was too much work for too little food, but it was a fun experiment.*

*Check it out—a thistle "artichoke" heart. Would anyone like to share?*

don't mind the spines, as are the crunchy leaf midribs and young flowering stalks. For a thorough account of these uses and methods, see *The Forager's Harvest* by Samuel Thayer (2006).

Of all the thistles included in his book, however, Thayer indicates Canada thistle as his least favorite. "The only part of the Canada thistle *C. arvense* that I use for food is the stalk," he writes. "Its other parts are inferior in quality."

Still, since Canada thistle is what I had available to me, I decided to give it a try anyway. I dug up a small pile of "roots" and boiled them for 20 minutes or so. They came out tough and stringy and for the most part inedible. Go figure.

## Canada Thistle Potlikker

On a lark, however, I decided to sample the potlikker—a term that refers to the cooking water or "broth" leftover from boiling greens. Potlikker is a Southern tradition that has its origins with American slave cooks. It can be

*The perennials' boiled roots were stringy and tough, but the potlikker tasted like hot artichoke tea.*

quite nutritious, since water soluble nutrients leach out of the veggies into the water.

As it turned out, my Canada thistle potlikker was delicious, like hot artichoke tea. Gregg compared it to nettle tea for its savory character. I strained the liquid through a coffee filter to remove any errant grit, and served him a small, steaming glass.

"Is this *all* for me?" he wanted to know.

Later, I pulled a ton of Canada thistle from the backyard, bagging the already-flowered ones so they couldn't spread their seeds further, and tossing all the rosettes and underground bits into a big box. Unlike other thistles that are biennials with a thick, edible taproot, Canada thistle has underground, horizontal rhizomes from which new shoots arise. Thus the "roots" I pulled and used for tea were actually underground sections of the upright stem. I quickly snipped these root-like stem bits into another box, which I left open so they could dry out until I wanted them.

A few days later I made a second batch of tea—this time by simmering the dried bits in water until a rich color developed. It turned out just as good as the tea I made from fresh parts, and the stem bits stood up to several rounds of boiling before I discarded them. I imagine

*Separating leaves and stems from underground shoots is quick work if you're wearing gloves. The root-like shoots can be left to dry until you're ready to make tea. Photo by Gregg Davis.*

Canada thistle potlikker would also make a good soup base, though with time it might turn very dark, similar to artichoke cooking water.

Since 2006 when *The Forager's Harvest* came out, Thayer has experimented further, discovering that the lateral shoots of Canada thistle, in midsummer, are perhaps the plant's best edible part. They are "a pain to get, but are excellent," he emailed.

You don't say? Next time I guess I'll have to dig a little deeper.

Interestingly, Canada thistle seems to have invaded our basement, which is really just a dark crawl space. What look to be long-stalked, pure-white shoots of Canada thistle are creeping across the dirt floor and up the concrete base of the wall. Their leaves are near-closed, white with the barest hint of yellow-green, lobed but seemingly without prickles. They look juicy and good. I am afraid of the substances that lurk in the basement, so I've refrained from biting into one of these crunchy white vegetables, no matter how luscious they look. But I dream about it.

## Juiced Canada Thistle Greens

I wanted to use the Canada thistle greens too, lest I be wasteful. For a while I toyed with the idea of cutting off the spines and slicing the slightly fuzzy leaves into thin strips to include in a batch of spring rolls

*Hot Canada thistle "root" tea makes a tasty, warming shot on a cold and rainy day.*

*This is why gloves are a good idea when you're washing and stuffing Canada thistle greens into the juicer.*

mixed with the thin, creeping stems and leaves of prostrate knotweed (*Polygonum aviculare*) from my stoop, and topped with spicy wild plum sauce. Yet somehow I never got around to cutting all those spines off.

"Just eat it!" Elpel and Reed exhort in their book, *Foraging the Mountain West* (2014), in regards to a Canada thistle leaf in its prickly form. "Look for the youngest, most tender leaves, and try eating some plain," they write. "The leaves prickle the mouth a bit, but to a tolerable degree. …Throw a few leaves on a sandwich or chop them in a salad, diluting the prickles with your other food, and you can easily forget the little spines are there!"

I invited Gregg to be guinea pig and give the prickly leaves a go in his sandwich, but he refused. "I'm not doing that," he said.

In the end I decided to juice them, figuring that would be a great way to process the leaf material without having to deal with the spines. It worked, though I couldn't find my gloves at the time so it turned out to be a bit more technical than I'd hoped, requiring me to handle the spiny greens gingerly as I washed, cleaned, and stuffed them into the juicer. Since

there are no spines on the leaf surface, just the edges, I took to folding the leaves before pushing them into the juicer hole, applying pressure only to the flat, spineless parts.

My juicer did not like the thick, aboveground stems, so I discarded those. I did not attempt to juice the "roots," though a friend on Facebook told me he likes Canada thistle juice best when you use the underground parts too. I can see why, for their artichoke flavor.

In any case, green juice came out in bursts. The leaves were not all that juicy, so I aided the process and sweetened the juice by stuffing in some ripe, foraged feral pears between batches. It was necessary to scrape leaf material out of the grater from time to time, but that was easy enough to do with a dull knife.

*This is how tough I am, but it's nothing compared to Tom Elpel, who eats the young greens without removing the spines.*

*A green juice with Canada thistle greens, a bunch of very ripe feral pears, a couple apples, and a squeeze of lime.*

I did not adore the flavor of the green liquid on its own, but juiced together with a couple apples, a bunch of pears, a carrot, and half a lime, it made for some tasty shots of green juice, which I served with a breakfast of eggs and roasted dandelion roots, Jerusalem artichokes, and potatoes.

"Is there more?" Gregg asked, downing his first glass. Oh yeah, buddy. There's a lot more—right out in the backyard, in fact!

For folks who plan to try this, please note that juicing results in a much-concentrated beverage. If you've never tried a plant before, it's best to taste the resultant juice in small quantities first to observe its effect on your body before juicing, say, 50 plants, and then drinking the whole thing down in one gulp.

## Forcing Soft Shoots to Grow

It's likely that my backyard Canada thistle will regrow, since I excavated few rhizome bits, if any, in all my pulling. If it does regrow, I am

inspired to try a method described to me by Chef Eric Skokan of Black Cat Bistro in Boulder. He and his wife Jill operate a farm that supplies the restaurant, and when they find Canada thistle growing there, they'll dig up 8-10 inches or so of the upright, underground shoot. They have timed it well enough to know that in roughly two weeks, the thistle regrows, so as soon as they see the first couple leaves popping out of the ground, they dig up the regrown shoot, which is much softer than the first, woody batch.

These "long, tapery roots are like the diameter of a chopstick," Skokan explained. He whips up a tempura batter, washes and dips them in it, gives them a quick fry, and presto—thistle tempura. The recipe is included in his cookbook, *Farm, Fork, Food: A Year of Spectacular Recipes Inspired by Black Cat Farm* (Kyle Books, 2014), which includes a chapter on foraged fare.

Whether or not to bother with Canada thistle as a wild edible plant is a matter of perspective. If your goal is to seek out the "treasures" of wild food—sought-after ingredients like morels and porcini, watercress and feral asparagus—then Canada thistle might not fit the bill. But if you have a wealth of this invasive species at your disposal, and relish the idea of making use of something that might otherwise end up on the refuse heap, there is plenty to be done with this so-called noxious invader.

■

*Photo by Gregg Davis.*

# Invasive Species on the Menu

## for Sustainable Food Advocates *By WFG*

*Red lionfish. Photo by Thomas Quine, licensed for reuse under Creative Commons.*

To clean a venomous lionfish without being injured, you need to carefully cut away the dangerous spines at their bases. After that, the flesh of these invasive species (*Pterois volitans* and *P. miles*), which are causing ecological damage in the waters of the western Atlantic, is edible and tasty—and you're doing native species a favor each time you eat one.

At least, that is the message from conservation biologist Joe Roman, author of *Listed: Dispatches from America's Endangered Species Act* (2011) and creator of www.eattheinvaders.org, which hosts information and recipes for many edible invasive plant, animal, and seafood species. He has long advocated that if the invasive species in our midst are edible—and especially if they are delicious—we can reduce populations by creating a demand for them as food.

In September, Roman took his message to the 6th annual Sustainable Food Summit from Chefs Collaborative, a national event held this year in Boulder, Colorado. The group is dedicated to fixing "our broken food system by engaging chefs in a network that inspires and educates them to change how they source, cook, and serve food."

Among the breakout sessions was a panel on Edible Invasives, included on the suggestion of Evan Mallett, owner of Black Trumpet Bistro and Joinery in Portsmouth, New Hampshire. The panel featured seafood demonstrations by Bun Lai from Miya's Sushi in New Haven, Connecticut; an introduction to edible invasive

plants by yours truly; and how to butcher a wild boar by Chef Eric Skokan, owner of Black Cat Farm Table Bistro in Boulder. Roman moderated the breakout session, which took place at the Black Cat.

## World's First Invasive Sushi Restaurant

Miya's Sushi is touted as the world's first invasive sushi restaurant. There, in addition to more well known sustainable seafood choices, Bun Lai offers a menu of invasive species, including lionfish. Native to the Indo-Pacific, lionfish likely spread as a result of the aquarium trade in the 1980's, perhaps released into Florida's coastal waters by their owners. From there, they spread throughout the western Atlantic Ocean and Gulf of Mexico. Lionfish can be obtained commercially through vendors such as Sea to Table, and consuming these invaders has been endorsed by NOAA (National Oceanic and Atmospheric Administration).

For his first demonstration, Bun Lai invited a few chefs to prep the fish by cutting away their poisonous spines, then dished up a plate of lionfish sashimi.

Next came a pureed squash soup with a savory character imparted by the glutamates in an invasive seaweed called "dead man's fingers" (*Codium fragile*). Bun Lai explained how he dived for the spongy dark-green fingers off the Connecticut coast during a storm. There's an art to making it right, he warned—you can't use a lot or it will turn out too fishy. But he must have used the right amount, because the soup was very good.

***Above:*** *Bun Lai presents lionfish sashimi to a group of chefs at the Chefs Collaborative Sustainable Food Summit. Photo by Evan Mallett.* ***Below****: Dead man's fingers can lend a savory character to soups. Photo by Erika Nicosia with the National Park Service, licensed for reuse under Creative Commons.*

*Asian shore crabs have displaced native species and non-native green crabs along the Atlantic coast. Photo by Erika Nicosia with the National Park Service, licensed for reuse under Creative Commons.*

A traditional palate cleanser in the form of a rice ball filled with mugwort—a leafy, non-native *Artemisia*—came next, followed by a dish with whole Asian shore crabs (*Hemigrapsus sanguineus*). These small, square crabs are displacing green crabs (*Carcinus maenas*)—also invasive—along the eastern shoreline. Bun Lai has also worked with Asian stalked tunicates (*Styela clava*), goo-filled invasives also known as "sea squirts," which are making quick work of New England's mussel beds. Roman is not a fan of eating them.

"A lot of the stuff I do doesn't bring people in," Bun Lai said. "Food prejudice is extremely visceral." He explained how our mothers' diets affect the amniotic fluid to create a genetic predisposition for what we will and will not like.

Still, he is interested in making use of what is overabundant around us. Even though certain species of fish can be produced sustainably, he explains on his website, the ecological cost of importing the fish can negate some of the benefits of how it was produced.

"Our challenge is not to import an exotic cuisine from afar but to use seafood that is locally available and to transform it into a regional cuisine that we can all be proud of, like clam chowder in New England, or crab cakes in the Chesapeake Bay," he writes. "By collecting invasive seafood on shell-

fishing beds, we are basically providing a free weeding service. We strive to be like the Musahar, the rat-catching people of India, who serve as an ecologically healthy, pesticide-free way of ridding farms of crop-destroying rodents."

Next up, invasive earthworms.

## Eating Plant Invaders

I used Colorado's three-tiered noxious weed list, with List A constituting what are considered to be the worst plant offenders, as a starting point for my presentation.

Among the edible List A species are Japanese knotweed (*Polygonum cuspidatum*), giant knotweed (P. *sachalinense*), and the hybrid Bohemian knotweed. These highly invasive plants were introduced as ornamentals and can now be found in most U.S. states, in some places growing in large swaths where they out-compete native vegetation. These rhubarb relatives are considered to be one of the tastier noxious weeds—known for young, tart shoots that are best in spring before they quickly grow too tough for eating. However, they can be extremely difficult to control. In the end, even Bun Lai admitted he went after his own

*I tried to reach Bun Lai for additional commentary, but he was up a tree chasing iguanas in the Everglades, where they have invaded native habitats.*

*Japanese knotweed, giant knotweed, and Bohemian knotweed take over large swaths of habitat. Their young shoots are tart and edible like rhubarb.*

*A garlic mustard invasion underway along a country road in Essex, Connecticut.*

Japanese knotweed population with herbicides.

Another more harmful edible invasive is garlic mustard (*Alliaria petiolata*), a white-flowering species that has taken over large areas of the eastern and central United States. Garlic mustard is allelopathic, which means it secretes a substance toxic to other plants and kills native species as it invades virgin habitats. In Colorado, it is only a Watch List species because we don't have a huge problem with it, but it is certainly here. In Connecticut where I grew up, it has taken over huge areas where previously there was none. I ask my mom to control her backyard population of garlic mustard by cutting it at the base before it flowers and reseeds itself. She is kind enough to dry the leaves for me, which I then powder in a spice grinder and add to potato gnocchi.

Here in high country Colorado, we have a daisy problem, if you can imagine. Fortunately, the two List B daisies are edible to varying degrees. Both are non-native, disturbed-area colonizers, and both sport characteristic daisy flowers with yellow centers and white petals. In my region, the scentless chamomile daisy (*Matricaria perforata*), which has frilly, finely divided leaves, is widespread. Though listed as edible in several sources, I have yet to create something palatable with it. The flowers are okay, perhaps best used as pretty toppings for a country salad. Some folks experience a skin reaction from handling scentless daisies

# Who Are You Calling Invasive?

After two people told me how much they loved "'the invasive weed' purslane," I felt compelled to make a distinction between truly pernicious invasive species that cause ecological harm, and what some might call "nuisance species" like dandelions (*Taraxacum officinale*) and curly dock (*Rumex crispus*). I definitely think we should eat the "nuisance species" if they are edible, but it doesn't mean we have to spray them with poison if our appetites fail us.

*Purslane, on sale as a vegetable in a Mexican market. It is called "verdolagas" in Spanish.*

Purslane (*Portulaca oleracea*) in particular is complicated because it may or may not be native to North America. It is one of many weedy succession species that colonize disturbed ground, preventing erosion while helping to create favorable conditions for other plants to grow. So in that context some of our "nuisance weeds" actually help the environment.

Environmental protection is more concerned with the truly harmful invasive species. Eating them is a "softer" means of ecological control than herbicides or pesticides, Roman explained, conceding that "applied uses of herbicides can be effective in controlling invasive species in sensitive habitats." But large scale operations, or targeting species that don't cause damage, can be costly, ineffective, and harmful to the environment.

"It's not about eradicating dandelions to have a perfect lawn or a monoculture," he said. "It's about getting out and foraging and helping local ecosystems."

*Scentless chamomile daisies have frilly or finely divided foliage, which I find bitter.*

*Oxeye daisy foliage is lobed and dark green. The flavor is unique, almost spicy.*

bare-handed and should probably proceed with caution when eating them.

Oxeye daisies (*Chrysanthemum leucanthemum* syn. *Leucanthemum vulgare*), on the other hand, make a nice edible. The leaves have an interesting, spicy flavor that I enjoy in salads with other leafy vegetables, or atop a gourmet pizza. Basal rosette leaves provide the biggest bang for your foraging buck, provided you can identify them before they put up a flower stalk, since the stem leaves are often smaller and more painstaking to gather.

This summer, I practiced some ecological control in Breckenridge with my Survival Plants class. We pulled both types of daisies, carefully bagging and discarding the scentless ones, and eating the oxeyes. Note that garden-variety Shasta daisies (*Leucanthemum x superbum*), which have larger flower heads and undivided leaves, are not invasive. They are, however, edible. There are also a number

*Whitetop invasion. How big is your appetite?*

of native "daisies" in the high country to which this account does not apply. Invasive daisies are likely to be found in areas disturbed by human activity.

Another tasty List B species found from Boulder to the high country is whitetop or hoary cress (*Cardaria draba*). The immature flower heads of this species can be cut and steamed like broccoli, provided they have not been sprayed with herbicides first. Check out my friend Butter's account, "Wild Mustard as Broccoli Rabe," at hungerandthirstforlife.blogspot.com for details.

"I have that all over my farm," said Boulder chef Eric Skokan, passing around his new cookbook, *Farm, Fork, Food* (2014), which includes a two-page photo spread depicting a large patch of whitetop. He likes to serve it in early spring, blanching the unopened flowerbud clusters in salted water to reduce the mustardy kick before serving them rapini-style. Meanwhile, he is controlling the plants' spread by picking them before they go to seed.

Skokan also digs up Canada thistle—one of several thistles listed as invasive in Colorado—on his Boulder farm, then allows the underground portion of the shoots to regrow so they are soft and palatable before frying them up tempura-style to serve at his casual farmhouse kitchen and pub, Bramble & Hare, which is adjacent to Black Cat Bistro.

*Eric Skokan of Black Cat Bistro in Boulder demonstrates how to butcher a wild boar, with conservation biologist Joe Roman looking on (left). Photo by Evan Mallett.*

*Wild boar family. Photo by Craig ONeal, licensed for reuse under Creative Commons.*

## A Belly Full of Wild Boar

For the final presentation, Eric Skokan demonstrated how to butcher a wild boar donated by Broken Arrow Ranch in Texas. He and his staff prepared some in advance, serving it side-by-side with store-bought pork for comparison. The chefs nodded and smiled over the lean, flavorful wild boar.

Wild boar is among the more destructive invasive species in the U.S. In 2011, the population was estimated between 2 to 6 million in 39 states and four Canadian provinces, according to John Morthland's piece in *Smithsonian Magazine*, "A Plague of Pigs in Texas." A full half of the pigs' population was in Texas, where damage was then estimated at $400 million a year.

Pigs (*Sus scrofa*) are notoriously smart, so they elude capture. "Farmers planting corn have discovered that the hogs go methodically down the rows during the night, extracting seeds one by one," Morthland writes. They cause erosion; muddy waters that may lead to fish kills; eat food set out for livestock; and sometimes eat young livestock too.

"It is the oldest invasive we know," Roman said, explaining how the wild boar population started when Hernando deSoto brought 19 sows to Florida in the 16th century. They multiplied en route, and got loose to form wild populations after the party landed. Since 2011, the wild boar population has grown exponentially. "Even if I point you to a map it will be outdated," Roman said. "They've been in California a long time. By 2010 they were up to New York. They just got into Colorado recently."

Some states endorse hunting feral hogs

*Chefs Collaborative board member and restaurant owner Evan Mallett often serves foraged food, including invasive species, at Black Trumpet Bistro and Joinery in Portsmouth, New Hampshire. His son might like foraging even more than he does.*

for personal consumption, and even allow commercial sale if they are processed at a USDA-certified facility. But they need to be processed right away, a problem Broken Arrow Ranch solves by hunting them from a helicopter followed by USDA-approved mobile processing units.

Wisconsin encourages aggressive removal, and Texas puts out public service announcements encouraging licensed hunters to take them. However, hunters need to make certain they're after wild hogs, and not domestic pigs. "Typically," Roman said, "you don't let pigs out." Otherwise, they go feral.

But the line is not always an easy one to draw. True wild boars are the feral descendants of the early Spaniards' hogs, interbred with more recent, domesticated escapees. "It's one single species, interbred," Roman said. Also, because of the risk of trichonosis, wild boar should not be served undercooked.

Although there are commercial sources for wild boar all over the country, a lot of it is farm-raised, Mallett noted. In those cases, "calling it 'wild boar' is technically a misnomer," he said.

Meanwhile there are few population checks for the actual "wild" ones that are causing so much damage. At this point, "the goal is not eradication, which few believe possible, but control," Morthland writes. "Even porcine populations reduced by 70 percent return to full strength within two or three years."

And yet, pork is so ingrained in the American diet that perhaps with wild boar, of all the edible invasives, there is potential to one day curb their spread while filling bellies at the same time.

## Eat the Invaders

Roman first proposed the idea to eat the invaders in a 2004 *Audubon Magazine* article, but "the silence was deafening," he said. "People thought it was a quirky, cool idea," but it didn't catch on until 5 or 6 years later, as foraging increased in popularity, especially among chefs.

Some invasive species biologists think it's a risky concept, arguing that if you create economic demand, sellers might be motivated to increase numbers. According to Roman, the solution lies in education. "When you put wild boar on the market, you have to make

it clear that the motivation is to reduce their numbers," he said.

Some species will probably never be in much demand, at least as food. Take nutria (*Myocastor coypus*), a large rodent first introduced to wetlands along the Gulf Coast for their fur in 1889. They have since multiplied on a grand scale and now cause damage to crops and levees. Nutria is edible, and a few restaurants serve it. But Americans are unlikely to clamor en masse for tasty, delicious rat—no matter how many adjectives or sauces you apply to it.

Another concern is that people might enjoy an invasive species enough to move it around. For example, if you loved Japanese knotweed so much that you planted it in your own backyard, but then it escaped and took over the neighborhood. "The worst case scenario—someone says carp is great, let's move it to our lake," Roman said. "Right now the movement is driven by chefs, people who like to forage, and mostly ecologically inclined people, so it's not a concern now," he said, adding: "It would be illegal for

*Eat your way through this kudzu invasion if you dare. Photo taken in Mississippi by Natalie Maynor, licensed for reuse under Creative Commons.*

someone to bring it to their state, but they might do it."

On the other side of the debate, there is the question as to whether we can actually impact populations of edible invasive species by consuming them.

Even if nibbling the edible young leaves and stems of your backyard kudzu (*Pueraria lobata*) doesn't keep it from overtaking everything in sight, however, it certainly makes use of what might otherwise end up (carefully bagged so as not to enhance its spread) in a landfill. And there can be no argument that the exercise spreads awareness in the process.

*It's not a glamorous job, but somebody has to do it. Here is Joe Roman, out fishing for invasive white perch on Lake Champlain. Photo by Josh Brown, University of Vermont.*

■

# Wild Eats

# Roasted Chicory Root "Coffee"

*By Wendy Petty*

I'll be the first one to tell you that making roasted chicory root coffee—a process that can also be used for dandelion taproots—takes some work. It requires first digging up the roots of a plant many consider a weed, then scrubbing them clean, cutting and drying them, roasting the scraggly chunks, then finally grinding them. If you are used to drowsily dumping regular ground coffee beans into a pot in the morning, then hitting a power button to arrive at a tasty brew, you might wonder why someone would go to all the trouble.

You will know the answer when you hold your first steaming mug of roasted chicory root coffee in your hands. Although it has much of the toasty, rich, bitter flavors we enjoy in coffee, all without a lick of caffeine, chicory root is lovely in its own right. When roasted and brewed, it is also ever-so-slightly sweet, with definite hints of chocolate.

The first step in the process is to dig chicory root (*Cichorium intybus*). If you are unfamiliar with chicory, the leaves of its basal

*Chicory in flower. Photo by KRoark, licensed for reuse under Creative Commons. Photo has been cropped.*

rosette look quite similar to those of dandelion. However, if you inspect them carefully on the underside, you will see hairs along the midrib of those leaves. For foragers new to the plant, it is perhaps easiest to start watching for its zig-zagging stalk and blue-purple flowers whose rays have jaggedy tips, in the summertime. That way, in the following autumn and spring, the ideal time to dig roots, you will have a better idea exactly which plant to dig. In theory, you can eat young wild chicory roots as a vegetable, but that isn't how I prefer them. If you are only using the chicory to roast for a beverage, the roots of any plant, even those which have already flowered, work just fine. In fact, dried chicory flower stalks, with their telltale dried flower bracts, can be spotted from afar, and can help you identify which plant to dig. Where you find one chicory plant, you will likely find many. They especially favor disturbed soil. That is to say, places that humans monkeyed around in, like trails and lots, and fields that have been dug up for various reasons.

I live in an area with dense clay soil, and find it easiest to dig chicory roots after it has rained or snowed and the ground is wet. I take a big shovel out into a field, find old, dried chicory flowering stalks, which usually have some green leaves growing at the base in all but the coldest of winter, and start digging. I find that

*Chicory roots and young shoots. Eat the greens if you like. Also eat the crowns, which are like "tiny escarole."*

small plants and roots are easier to chop, but I'm not terribly picky about which plants I dig. I do leave the leaves attached to the roots until I get home. This ensures that I've accurately selected only chicory roots, and not other roots I may have accidentally dug at the same time. Before returning home, I try to refill dirt into all of the holes.

To clean the chicory roots, I first cut off the green leafy tops, saving the leaves to eat if they aren't too bitter, and most definitely saving the crowns, which are like tiny escarole. I then fill a bucket with water, dump in the roots, and start working them with a scrub brush. This part of the process isn't very glamorous, as it requires sloshing around in muddy water for quite some time. A tangle of wild chicory roots that have grown in tough soil aren't nearly as easy to clean as store-bought carrots. After all of the chicory roots have been scrubbed in the bucket, I give them a final rinse in clean water.

Then next step is to chop up the chicory roots to be dried. The most important part of this step is to try to cut nearly equal-sized pieces. This will come into play during the roasting process, where smaller pieces tend to burn before the larger pieces roast. So, it's good to cut the roots as evenly as possible. How big? Well, keep in mind that they will shrink during the drying process, and that smaller roasted pieces will likely be easier to grind. I'd say the pieces I cut for my last batch were no bigger than a candy corn.

*Chicory roots, chopped and dried, can be roasted to make chicory coffee. You can use the same procedure to make dandelion coffee.*

*Dry the roots first, then roast, grind, and brew when ready.*

I learned from Samuel Thayer's account of roasting chicory (*Nature's Garden*, 2010) to dry the roots first, instead of directly roasting them. Why? Well, if you put a bunch of fresh chicory roots in the oven to roast, it takes longer, and you are more likely to get uneven results. So, I simply stick my cut chicory roots in the dehydrator overnight. They could also be air-dried or dried in the oven on very low heat, if those are your preferred methods. Once the roots are dried, they needn't be roasted right away. I'd think they'd store nearly indefinitely until you're ready to roast.

I find roasting to be the trickiest part of the process. It seems obvious when you're just talking about it, what roasting a root might be like. But when you're in the act of doing it, and have put many hours into the process, the difference between roasted and nearly-burnt isn't as obvious as first imagined. From my own experience, I prefer to roast the roots at a lower temperature, like 300 degrees (F), for a longer period of time because I feel like it gives me a greater level of control over the

***Top:*** *Learn chicory when it's in flower.*

***Right:*** *Old, dry chicory flower stalks, shot in Colorado around 6,000 feet. Photo by Wendy Petty.*

***Below:*** *Chicory root coffee. Photo by Wendy Petty.*

process. I spread the dried chicory roots out on a baking sheet in a single layer, and place them in the hot oven. I've found the roots turn a pretty impressive shade of brown after 20 minutes. After that point, I set a timer for 10 minute intervals, and keep poking my head in the oven. The last batch of chicory roots that I roasted took about an hour. But I've had them take as little as 40 minutes, and as long as an hour and a half. I pull them out of the oven at the point where they seem to be releasing the tiniest bit of smoke, although their color never seems to darken much past the color they achieve in the initial roasting period.

When I think I've roasted my chicory roots for the proper amount of time, I grind and brew a small test batch before turning off the oven. This ensures I've roasted them to the darkness I enjoy.

Once they are roasted, chicory roots can be stored whole, or ground. I prefer to grind them on an as-needed basis, using either my mortar and pestle (which usually requires that I also run them through a sieve to get out the larger bits) or a regular coffee grinder. Roasted chicory coffee can be brewed in the same method you use for brewing bean coffee, but keep in mind that it is much stronger. You will have to experiment to determine how strong you like it, but I find that I use about 1/2 tsp of ground, roasted chicory root per cup of brew. I like to serve my roasted chicory root "coffee" with a big splash of milk to round out some of the bitterness and enhance the chocolate flavors.

If you have brew left over, give this dessert granita a try:

*Photo by Wendy Petty.*

## Roasted Chicory Root Coffee Granita

**Ingredients:**

3 cups brewed roasted chicory root coffee
1/4 cup sugar (or to taste)
1 tsp dutch process cocoa powder

**Instructions:**

1. In a small cup, mix the sugar and cocoa powder. This helps to incorporate the cocoa powder into the liquid in the next step.
2. Stir the sugar and cocoa powder into the still-warm roasted chicory root coffee until the sugar has fully dissolved.
3. Let the sweetened brew cool to room temperature, then refrigerate it for at least 2 hours.
4. Pour the sweetened roasted chicory root coffee into a 9x13" Pyrex, or other similar freezer-proof flat container. Place it in the freezer, and set an alarm for 30 minutes.
5. Take the container out of the freezer, and use a fork to rake through all of the freezing liquid, breaking up any crystals that have formed. Continue to do this every 20 minutes until it looks like it has uniformly frozen into small fluffy crystals, like snow.
6. Serve the roasted chicory root granita in a cup or mug with a dollop of whipped cream. I don't think the cream is optional, but I suppose that's up to you.

*Find Wendy Petty online at hungerandthirstforlife.blogspot.com.*

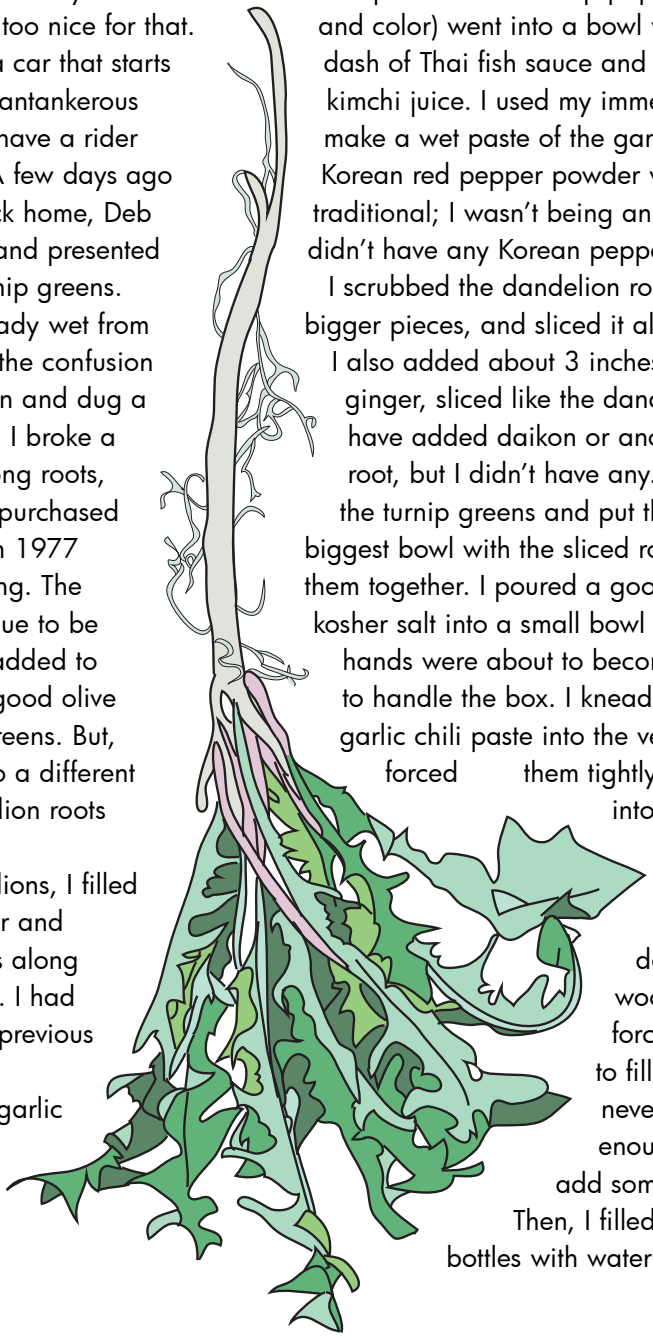
# Dandelion Root Kimchi

*By Tim Furst*

My friends are artists, but they aren't starving—their garden is too nice for that. Unfortunately they have a car that starts even less often than my cantankerous chainsaw so I frequently have a rider when I travel into town. A few days ago when I brought Chris back home, Deb walked from the garden and presented me with a big bag of turnip greens.

The next morning, already wet from cleaning greens, I sat in the confusion that constitutes my garden and dug a bucket full of dandelions. I broke a trowel trying to get the long roots, but since the trowel was purchased as camping equipment in 1977 it doesn't owe me anything. The dandelion greens were due to be braised with garlic and added to white beans and lots of good olive oil—Italian beans and greens. But, like Marco Polo, I went to a different continent with the dandelion roots and turnip greens.

While I dug the dandelions, I filled a big stock pot with water and threw in the turnip greens along with a big handful of salt. I had saved some juice from a previous batch of home-fermented kimchi. A rough chop of garlic (a whole head), about a tablespoon of ground chipotle (for heat), and a couple of tablespoons of half-sharp paprika (for flavor and color) went into a bowl with a good dash of Thai fish sauce and the leftover kimchi juice. I used my immersion blender to make a wet paste of the garlic and peppers. Korean red pepper powder would have been traditional; I wasn't being an iconoclast, I just didn't have any Korean pepper.



I scrubbed the dandelion roots, peeled the bigger pieces, and sliced it all very thinly. I also added about 3 inches of peeled ginger, sliced like the dandelion. I would have added daikon or another crunchy root, but I didn't have any. Next, I drained the turnip greens and put them in my biggest bowl with the sliced roots and tossed them together. I poured a good handful of kosher salt into a small bowl knowing that my hands were about to become too messy to handle the box. I kneaded salt and the garlic chili paste into the vegetables and forced them tightly but carefully into quart canning jars. This batch made almost 2 quarts. Pressing down with a wooden spoon will force juices to start to fill the jar but I never seem to get enough juice, so I add some brine to cover. Then, I filled a couple small bottles with water and put them in

the quarts to keep the neo-kimchi submerged. My kitchen is still chilly and the kimchi is still sitting on my counter, slowly fermenting. It has been three days. I'll probably taste it tomorrow.

I learned to make kimchi with a beautiful group of friends—we call ourselves the kitchen witches—who are amazing with plants, potions, pots, and pans. Unfortunately we are not so tremendous with documenting our efforts and writing good recipes. This is mostly my fault because I have worked on cookbooks before and I know how to test and write recipes. If you are reticent about fermenting your own kimchi, I recommend looking at the books of someone like Sandor Katz as a guide. Then, using your own intuition, add the flavors and ingredients that you have and that you like. I have tasted dandelion greens in kimchi before (delicious!) but this is the first time I have tried the roots. I'm pretty confident I'm going to like it.*

**Tim submitted this piece to the Hunger & Thirst dandelion recipe roundup a while back. I was intrigued, so I followed up with him on how it turned out. He writes:*

## Recipe Reflection

I liked the kimchi fresh, before it fermented. After it fermented I decided that I really didn't like the chipotle; the smokiness seemed wrong, especially combined with the bitterness of the dandelion root. I've made plenty of mistakes in the kitchen but I understand cooking and flavor well enough that my mistakes are usually easily repaired. I'd use another chile if I made it again—Korean chile flakes or some cayennes I have dried, not chipotle.

■