Blue Ridge Farmer

Regenerative Farming
Foraging Tips
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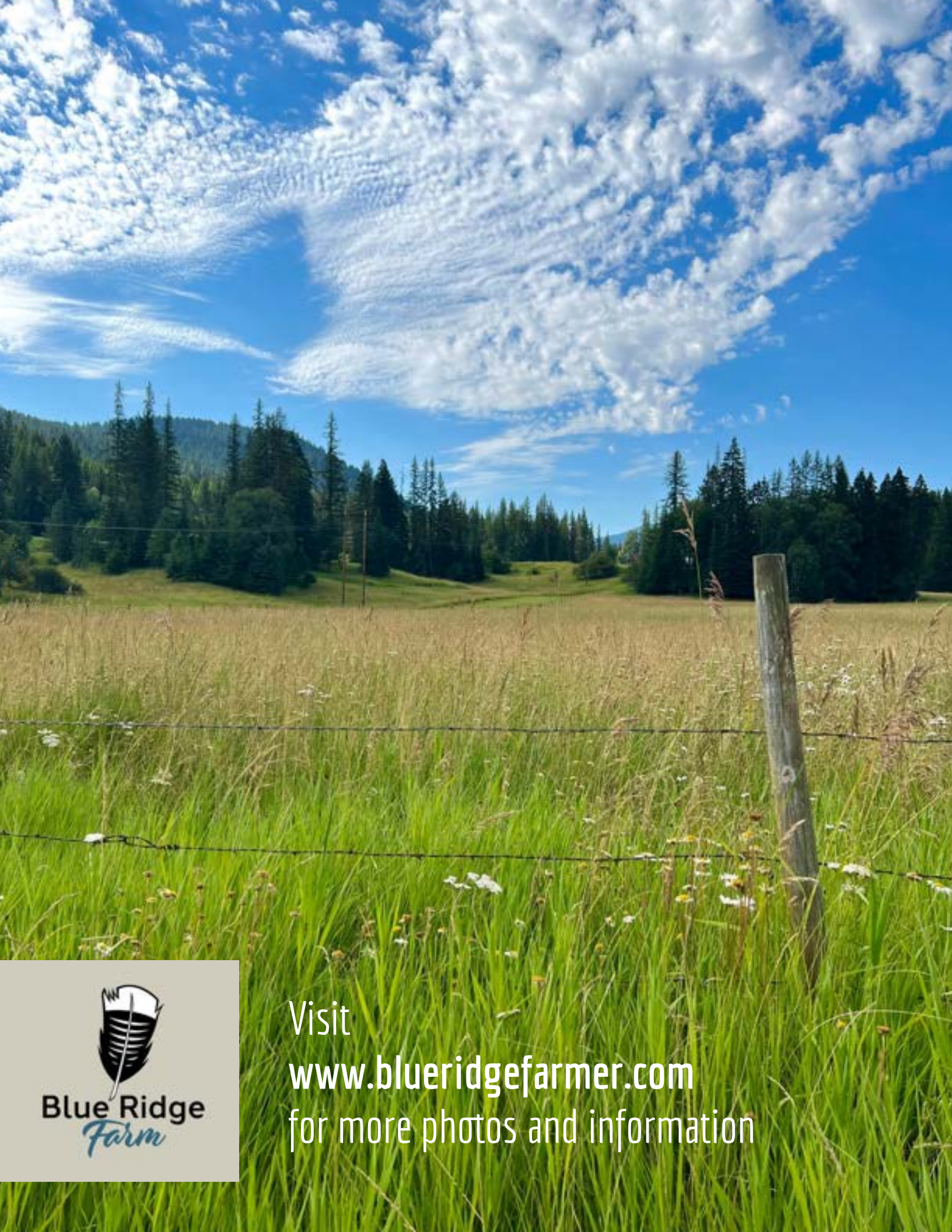
Farmstead Recipes

The Conservation Issue

Volume 2: 2022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In this Issue:

Letter from the Farmer

Farming is an exercise in eternal optimism, and ironically enough, winter is a time when farmers are at their most optimistic. It is a time spent planning for the next season, envisioning crops that will grow healthy and productive, and willfully ignoring (for a few precious moments) thoughts of pests, weather, and various other stresses. As I sit here watching the snow pile up outside my window, with seed catalogs and garden plot maps spread out in front of me, I am reminded of this eternal optimism. The last year was a challenging one, filled with high populations of gophers and wireworms, equipment failures, more infrastructure construction, and many hard-learned lessons. Yet the end result was a healthy jungle of garden plants and a harvest that exceeded any of our expectations. This achievement came as the result of simple hard work and a mindset to never give up - a quality of attitude that is priceless in today's world, and one of the many important lessons that farming will teach you. Believe in your own success, and you will manifest it into your endeavors.

- Jillian Garrett

This Page: Wild turkey hens forage in the pasture near the greenhouse; *Opposite Page, Top Image:* Ryan Garrett uses a no-till method of broadcast seeding in the pasture; *Bottom Left Image:* Delicious northern-hardy tomatoes harvested from the garden, *Bottom Right Image:* The rugged 30'x72' Rimol high tunnel greenhouse

Regenerative Agriculture

Understanding the Hidden Costs of Eating

By Ryan Garrett

This Page: Marigolds are important companion plants in the greenhouse; *Inset*: Wireworms are attracted to potato baits; *Opposite Page*: A praying mantis patiently waits for a meal in the garden

We are frequently asked the question, "What is regenerative agriculture?"

Well, you can't really talk about regenerative agriculture without also discussing organic agriculture, and in recent times, it's practically impossible to discuss organic without taking into consideration its corporate appropriation and re-branding. That's a long conversation that we'll get into a bit later. For now, just keep in mind that regenerative agriculture provides a way to leave the land better than we found it, by focusing on soil improvement and biodiversity. That core concept is a driving value in our daily lives here on the farm.

Regenerative agriculture does not yet have a government-backed certification agency. On the downside, this means that just about any farm can lay claim to the distinction without needing to follow the spirit of the practice. On the upside, we have seen how the "organic" label has been twisted from its original principles to mean something outside the perception of most consumers. It has become industrial. When we think about organic practices, we tend to think of food grown in a more biologically natural way, associated with the land and the soil of a small, diverse farm. I use the term *biologically natural* because "natural" is another word that has been bought and betrayed by big business. Most people would not consider spraying down a greenhouse with pesticides as a natural or organic practice, but if the "right" pesticides are used, they can absolutely have these labels. The idea that a hydroponic tomato factory can achieve "organic" status should illustrate how far we've strayed from the initial meaning of the term. It is for these reasons that I hope regenerative agriculture never ends up being a government certification, though a few smaller independent organizations are beginning to offer certifications on a farm-by-farm basis.

Because each farm is different, and each farmer must decide on the best methods to achieve a regenerative model, let me talk a bit about what it means to us. Here at Blue Ridge Farm, our agricultural plan is best summarized in four key values: Soil Health, Input Reduction, Biodiversity, and Outreach.

Foremost in our goals here is to improve **soil health**. Healthy ecosystems require healthy soil – it is our most precious resource - and yet we as a society take it for granted. So much so that we have sloughed off a great deal of our most precious resource down the Mississippi River and into the Gulf of Mexico. On our farm, we make every effort to build up the health of our soil using animal-based manures, no-till farming practices, pasture rotation, and most importantly, always having some sort of protective mulch layer between the soil and wind erosion. These methods may not be as easy as buying synthetic fertilizer from Dow Chemical, but it's a long-term investment in the health of our land and our farm.

That brings me to my next value: **Input reduction** is a huge part of the regenerative model. Most farmers are familiar with the idea of waste not want not, but this takes it a step further and creates more of a closed system of agriculture. Farms already produce green- and animal-based manures which can be readily turned into compost, so why buy synthetic fertilizers from somewhere else? The best fertilizer is already found on your farm. We also use drip irrigation to limit water consumption, take the additional steps of saving seeds wherever possible, and do our best to use renewable energy where we can. A good example of the latter is in our germination greenhouse, where we use multiple 55-gallon barrels of water as solar-powered heat batteries to keep our plants warmer during the night and help extend our rather short growing season.

Biodiversity both in and on the land is key to a healthy environment, and we also believe that it is key to a healthy farm. We make sure that agriculture always makes room for, or even encourages, wildlife. We avoid pesticides that would hit the insect populations en masse, instead favoring the approach of encouraging beneficial predators to be a part of the landscape. When direct action is needed against a pest, we use manual kill methods to best limit collateral damage. For example: it would be much easier to simply poison the gophers that end up in our garden plots as opposed to trapping them, but trapping means we don't have to worry about poisoning a bird of prey or a coyote that manages to eat the dead gopher. This has the added bonus of maintaining healthy populations of predators that help us keep pest numbers in check. We could easily use chemically-treated seed to prevent the wireworm infestations that hits us hard each spring, but those are not chemicals that we feel comfortable putting into the land (especially so near our many artisanal springs) or into our customers. Yet another method we could use to deal with wireworms would be to intensively rototill the land multiple times early in the season, completely destroying our complex soil microbiota in the process (which would be deemed acceptable under organic certification). Instead, we practice a no-till farming philosophy here, and have the endless task of locating wireworm infestations, baiting them with rotten potato slices, and manually extracting and killing every wireworm by hand. It is a disgusting and tedious process, but we choose to do it rather than destroy our soil. Dealing with pests is an unfortunate but necessary part of farming, and it's deeply upsetting when someone tells us that veganism is the key to ending suffering on earth. Nothing is ever that simple, and there is always a hidden cost to eating - some of us are just a bit more familiar with the sordid details of the transaction. When you look at your plate, there is always a price that has been paid in wildlife death and displacement, habitat loss, and generally soil degradation. The cost can never be zero, but it can be reduced and offset through conscientious land management practices. Just because we keep the deer out of certain sections of our farm does not give us the right to direct them off the land entirely, nor to mess up their travel corridors. We consider ourselves citizens and stewards of a complex biological system here, and we make our decisions based on what is best for the whole.

This brings me to the last value: **Outreach**. We got into farming because we saw an ever-expanding disconnection from our food. No society in human history has ever had such distance between themselves and the origins of the ingredients on their plate. For my wife and I, a closer connection to our food has made us behave in a less-wasteful, more conservation-minded way. While small-scale farming is not accessible to everyone, we can share our experiences and our insights, as well as our mindfully-grown produce. Farms are in a unique position of supporting the communities that support them. Our relationship shouldn't be encapsulated in a produce purchase at the cash register. We need to do better than that if we are ever going to reasonably improve our food systems.

This value-driven approach is the core of our long-term vision here. We want this scrap of land to be richer for our time spent on it. We want our community to have access to ethically grown, nutritious, and - dare I say - affordable food. If a few other farms see this as a call to action and take the same sort of approach, we'll have done something that can truly be called *Regenerative Agriculture*. Building the world up should be the goal for all of us, and that starts with the soil under our feet.

This Page: How well do any of us know the origins of what is on our plate? *Opposite Page, Top Image*: Trapping gophers is an unsavory but necessary part of farming here; *Bottom Image*: Ripe tomatoes from the garden

January Optimism

By Jillian Garrett

Center Spread: Heirloom corn seeds
Left Image: Wild turkey tracks in the snow

January is the month of patience, when the snow is still piled high on the ground, the temperatures remain frigid, and only the potatoes retain hope for spring. January is also the month of optimism, when the seed catalogs begin to arrive, and thoughts turn to the prospective bounty of a summer garden.

Sometimes, at the tail end of January, we are given the briefest glimmer of hope – temperatures tiptoeing just enough above freezing to begin melting some of the snow, revealing portions of ground not seen since the previous year. This bit of mild weather might last for a week or so before plunging back down into the bone-deep chill of February. As a farmer, this is one of the most difficult times of year. You have spent the long winter months eagerly planning out projects for the coming year yet are unable to start any of these thousand tasks until March's warmth begins to melt the snow in earnest. February is an ironically long month...

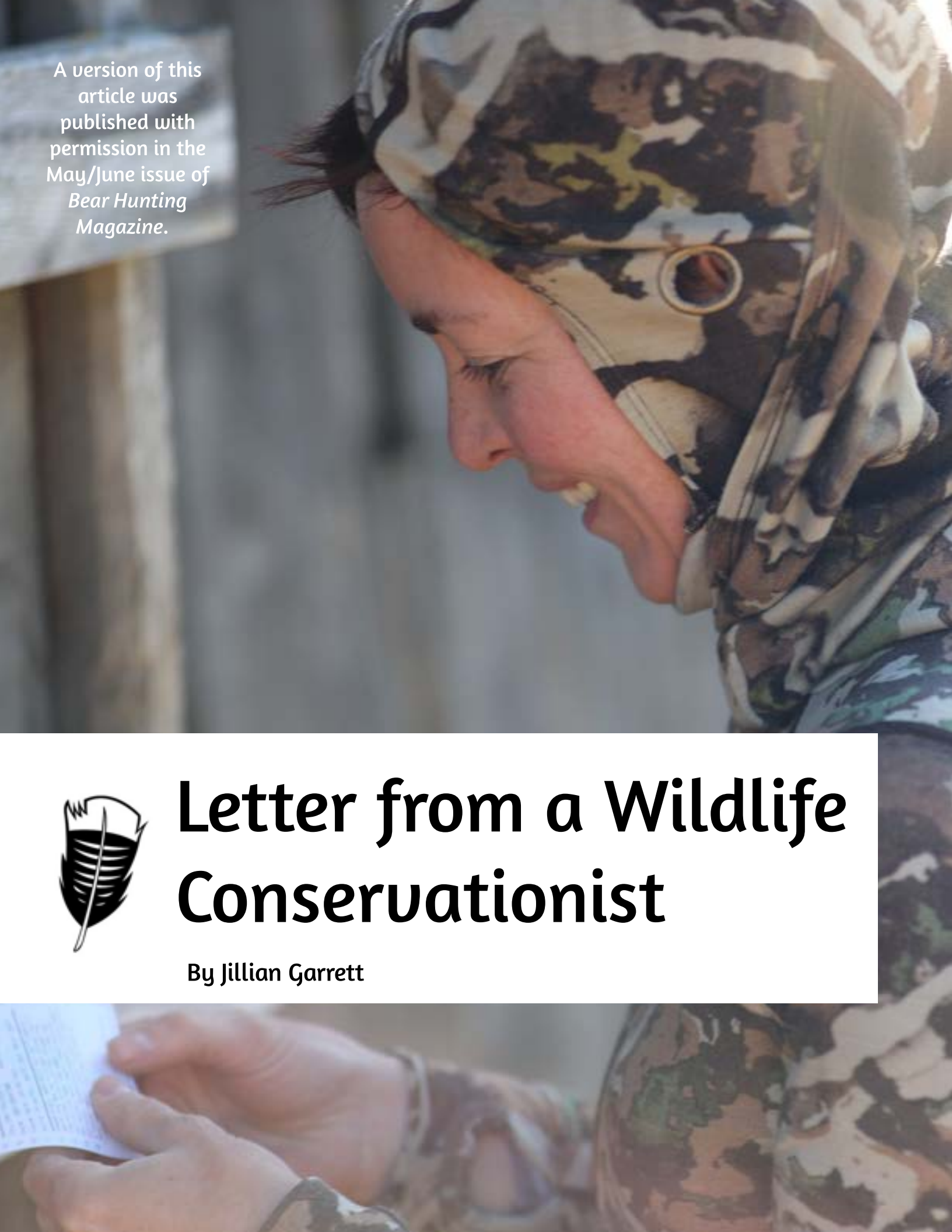
During the month of February, I begin wistfully looking at my stash of garden seeds, greedily fingering each individual bag and counting varietals as though my personal wealth was measured purely in seed. Perhaps it is. I want nothing more than to begin germinating this latent bounty, but I know that it is still too early. Spring has not yet arrived.

And so the days of the month slowly pass...

To keep myself occupied, I spend time carefully plotting out my gardens, using grid paper to estimate the exact number and spacing of each vegetable plant. Even with a new high tunnel greenhouse ready to supplement the outdoor "kitchen" garden, it is still not enough space. I am ever greedy for more plants. This has prompted the addition of a second, slightly smaller, greenhouse to our farm family: a solid polycarbonate structure which will be my place to germinate seeds in spring and grow peppers in summer. During the late fall and winter months, it will be a cozy home for radicchio and cabbage crops - a place of green growth and full spectrum lights to give me comfort during the dark days of winter. Thinking of this space gives me hope and makes the cold months pass by a little more quickly.

In March, the temperatures will begin gently warming, and the snow will slowly recede from the landscape. Projects that have been carefully nurtured through the winter will burst forth with the coiled energy of an enthusiasm that was held back for far too many months. Winter is the time of planning on a farm; spring is the arrival of action, when the fire of new beginnings burns brightly in all of us. Our hope for the year grows with the germination of each new sprout in the garden and banishes - for a short time - the darkness of those long winter months. That hope is just around the corner.

***Center Spread*: Fog encases the mountains overlooking snow-covered pastures**
***Bottom Image*: A fava bean seed germinates in the garden**



A version of this article was published with permission in the May/June issue of *Bear Hunting Magazine*.

Letter from a Wildlife Conservationist

By Jillian Garrett

This Page, Top Image: One of the many black bears caught on trail camera this year; *Bottom Image*: Wild chokecherries grow in profusion along our creek; *Opposite Page*: Jillian Garrett punches her first hunting tag

I am a farmer, a conservationist, and a hunter.

(Yes, it is indeed possible to be all three things at once.)

I grew up in the California of the 1980s, where Costco memberships were the norm, and the suburban lifestyle was all we knew to strive for. This was the era of the "save the tiger/panda/whale/etc." movements, a time of big wildlife conservation push. My parents were stalwart supporters of the movement, mailing letters to important figures and maintaining memberships in all of the major conservation-minded organizations. As you might expect, we were vehemently opposed to hunting, and owning guns was unheard of in my household – not merely frowned upon but never even talked about, so anathema was it to our way of mind (years later, I learned that my grandfather owned both a BB gun and a .22 rifle, though he wisely never mentioned it to anyone else in the family). I bring all of this up so that you can fully understand my history, and why I bring a unique perspective to the current issues at hand.

As I grew up, I began to wonder where my food came from. Yes, it technically came from the big chain grocery stores, but where did it actually *originate* from and what processes were involved in getting it to me? These were questions that eventually led me into farming: a desire to understand my food source, and to take a personal level of responsibility for what I ate. I took the regenerative approach, never using pesticides or synthetic chemicals, and doing everything in my power to preserve and maintain the health of the soil. As I learned more about the importance of biodiversity on a farm, I began to understand that maintaining a balanced ecosystem extended to the native wildlife living around me. I started farming with an eye towards preserving habitat, decreasing invasive species, and allowing wildlife to thrive on the property. Animal numbers and diversity increased over the years, and my farm was the better for it. I learned what environments were required for what animals – timber for deer, shrubby understory for grouse, parkland and pasture for wild turkeys - and worked to create and maintain those areas. As a result, plant diversity also flourished, creating food and habitat for even more species. I observed the native hazelnut trees slowly increase in number in the shady forest understory, providing a vital mast crop for the local black bear population. I watched a small sow raise her cubs every year (and hilariously photobomb my trail camera) in the cool, shady creek bed of the farm's western forest. Even after I became a hunter, I remained passionate about wildlife conservation.

Now we move on to the hunting portion of this: I am a meat-eater. To be fair, I did try *very* hard to be a vegetarian for quite a few years, but it didn't suit me (my health suffered) and eventually I gave it up in favor of choosing a more mindful method of sourcing my protein. Originally, I raised or purchased only grass-fed, organic meats, but even this path didn't fully satisfy my desire to eat in the most ethical way possible. Unless you were able to maintain a very large acreage, domestic livestock were still hard on the land, even when organically raised. They were damaging to riparian areas, and when allowed to overgraze could devastate pastureland and result in a heavily-eroded soil fit only to grow weeds. I decided that there had to be a better way to source my meat that was less impactful to the land. The thought of hunting was both terrifying and intriguing to me. It was an enormous undertaking and a daunting learning curve. I went from never having touched a firearm in my life to learning how to shoot not just a rifle and a shotgun but a compound bow as well. I practiced constantly – for years – until I felt capable of making an ethical shot. My number one goal was always as quick and humane a death as possible for my quarry. Even then, it still took me three years before I harvested my first deer. When you have to work that hard for your meat, I can promise you that absolutely nothing goes to waste. Can we say the same thing about a chicken purchased from a grocery store? According to the USDA, 30-40% of our food supply is wasted, which works out to about 133 billion pounds or $161 billion worth of waste (according to the 2010 statistics). This is mainly in part, I believe, because so many people live in urbanized areas that are completely disconnected from their food chain. Even living in a more rural area, I have had children come up to me, point to my chickens, and ask, "What are those things?" These children had never seen a chicken before that wasn't already processed into a nugget or conveniently plastic-wrapped in the refrigerated section of the grocery store. There is something deeply disturbing about living in a society that claims to support natural, organic living and yet stigmatizes a section of the populace who are willing to look the more sordid aspects of eating directly in the face, and who are ready to take full responsibility for what they eat. Because of this general disconnect between people and their food, there always seems to be an unfortunate stigma associated with hunting - this image of a gun-toting, un-educated Elmer Fudd type who subjects an animal to a horrible, agonizing death. I have spent a great deal of time outdoors observing wildlife, venturing out with other hunters, and slaughtering my own domestic animals for meat. From these observations, I have come to two conclusions: (1) Nature is beautiful but intensely brutal, and there is no such thing as a painless death; (2) The death of the animals that I have hunted have all been quicker and less stressful than any of the domestic animals I have killed for meat. If you don't believe me, you should visit your local farm and observe the last chicken or cow on slaughter day. They absolutely know what is about to happen, and as a result they have far too long to think about it. That is intensely stressful for those animals. Now compare that with the death of a deer or a bear, who in all likelihood were not even aware of the hunter before shot was fired. The outcome may be the same in both cases (and a moot point for the animal), but it's a night and day difference with regard to the stress and suffering of the animal involved. I would rather die a hunter-killed deer than a farmer-killed turkey (just saying...).

This Page: A Song Sparrow stands on a fence post; *Opposite Page, Top Image*: Wild turkeys during the spring mating season; *Bottom Image:* Skunk Cabbage is one of many important springtime foods for wildlife

I am a farmer. I am a conservationist. I am a hunter. The sum of this trifecta has resulted in a unique perspective and a knowledge about my food and how I obtain it. I manage my 80+ acre farm with a priority for wildlife habitat. I support science-based wildlife policy based on population statistics and behavior studies. I understand that harvesting the males of a given species – be it deer or bear or turkey – is an effective management tool, because doing so does not adversely affect populations in the same manner that harvesting females would (sorry, boys!). I support the continuation of an understanding of where our food comes from, and a willingness to look the consequences of eating meat directly in the eye. When all is said and done, and hunting is gone forever, where will that leave us? A society of people who claim to love wildlife and organic agriculture but who possess no concept of what eating truly entails. How can we justify eliminating the killing of, say, a bear, but not a domestic cow? Where is the line? And once we remove the cultural and economic value of that wild animal, where is its protection then? Without the revenue generated from the sales of hunting licenses, weapons, etc. (per the Pittman-Robertson Act), who will pay for the continued conservation of these animals and their habitat?

We cannot effectively manage and conserve wildlife populations without the support of policies that are based on science. Sadly, as we become a more urbanized nation with a decreasing connection to nature and to our food source, science plays less and less of a factor in the decision-making policy. This was recently illustrated by the suspension of Washington's spring bear season. According to the scientific data provided by the Washington Department of Fish and Wildlife (WDFW), black bear populations are currently sound and able to support the spring harvest. However, for the majority of the votes against the season, the scientific data never once factored in. Under the North American Model of Wildlife Conservation, you cannot manage prey animals without also managing predators. That is essentially like leaving an un-managed variable in an artificially-managed system: it doesn't work and will result in an unbalance (and potential collapse) of the entire system. This does not do justice to the bears or any other wildlife species. If America is a group of stakeholders in charge of managing a wildlife ecosystem, we need to take the holistic approach and manage for *all* forms of wildlife. We no longer live in a truly natural system – humans have permanently altered the landscape, to the detriment of wildlife – and now we need to manage it like the artificial system it has become, from the top of the food pyramid and down, from the predators to the prey.

I could come at this argument from so many different angles. I could tell you that I am a minority in the hunting world: a woman as well as a scientist by training, and that the continued disparagement of the scientific data pains me deeply. I could tell you that after so many years of learning how to be a successful, ethical hunter, I was finally ready to apply for my very first bear tag this spring of 2022. I could tell you that I have a fear of firearms that stems from one foggy night when an injured black bear killed my favorite llama and broke my heart, and that I have been struggling to overcome that post-traumatic stress for *years.* I could also tell you that that experience didn't diminish my fascination and respect for bears. I could tell you so many different things about myself, none or all of which may sway your way of thinking about this issue. However, I instead chose to share with you my perspective on the issue of bear hunting, to better illustrate that we all come to our beliefs from very different backgrounds and agendas, but the important part is that we band together in support of what is best for the wildlife involved. As a scientist, it pains me to hear the science being wrongfully discredited as a rationale to support one side's agenda. I simply ask you this: Do you know where your food comes from? Are you willing to take full responsibility for what you eat? You can be an ethical hunter *and* a conservationist. You can support healthy wildlife populations while also providing food for yourself. You can love and respect an animal and still desire to hunt it.

This Page, Top Image: A herd of whitetail does and fawns; *Bottom Image:* Corned black bear with cabbages and potatoes from the garden; *Opposite Page:* The author with her first deer, harvested on the property

Vegetable Transplants

Bigger Isn't Always Better

In our northern climate, with its incredibly short growing season, most garden vegetables must be grown from transplants as opposed to direct-seeded into the ground. This is because transplanting gives you a head start on your harvest, as vegetables grown from transplants produce crops earlier than those grown from seed. If you are looking to purchase your transplants, here are few key tips to remember when selecting them at the market:

Don't be fooled by vibrantly green and over-fertilized plants, as their accelerated growth comes at the cost of softer, weaker leaves and stems which are more prone to breakage. Studies have also shown that garden pests such as aphids are more drawn to plants that have been heavily fertilized, as the plants are less able to resist the depredations of the insects.

Seedlings that are too young may be unable to withstand the shock of transplanting, but bigger isn't always better when it comes to transplants. A larger, more mature plant tends to be less able to withstand the shock of transplanting because it has become rootbound within its container. Additionally, an older plant that has switched over to fruit production will be less able to acclimate after being planted in the garden (this is due to the fact that it is no longer expending energy into vegetative - i.e. leaf and root - production). ***While that large tomato transplant adorned with promising yellow flowers may seem like a better bargain, remember that those older plants will take much longer to overcome transplant shock, resulting in a slower yield time and a lower overall harvest.***

Incredible Nettles

By Jillian Garrett

Spring is one of my favorite seasons. The world is awake and becoming verdantly beautiful again after so long a bleak winter. The wildlife has finally returned and, while the garden may not be ready yet, the wild spring edibles are emerging to help round out the kitchen larder. One of the edibles that I get the most excited for are the stinging nettles, which grow with abandon around the old barn to the north of the house. The nettles, which prefer moist soil, are kept well-watered by the boggy spring-fed ground in this area of the property.

Stinging nettles *will* in fact sting you, so it is very important to wear gloves and harvest them with care. The "sting" is eliminated through either cooking or thoroughly mashing them with, for example, a rolling pin. These methods help break up the tiny syringe-like hairs full of formic acid that give stinging nettles their bite. Once they have been properly processed, nettles can be enjoyed in everything from pesto to pizza. My personal favorite way of eating them is to make a delicate soup using a recipe out of The Hunter Chef Cookbook. This soup is given a creamy base through the use of potatoes (which we usually still have in some abundance in the root cellar) and is flavored with nettles and other early spring herbs from the garden. It's an excellent and easy recipe for this time of year because you can utilize both fresh ingredients (the nettles and garden herbs) as well as the last of the vegetables from the root cellar (onions, potatoes, garlic, etc.). In consequence, it is a wonderful celebration of this particular season, bringing together elements of the new growing year with the old. Until my garden starts producing again, you will find me out in the nettle patch, in gloves and a long-sleeved shirt, merrily harvesting my dinner and giving silent thanks for a bountiful spring.

Capturing Shadows

By Ryan Garrett

Studies in Cougar Conservation

If you build a fire, chances are that every available person will be inexplicably drawn to sit near it, entranced by something that has fascinated our species for millennia. Though we have moved away from our need for fire in everyday life, that pull remains embedded deep within our psyche. In a similar way, our ties of cooperation and companionship with domestic dogs run deeper than any of us can possibly comprehend. They have been our fireside companions and hunting partners, though in modern times that too has changed.

***This Page, Top Image*: A cougar caught on trail camera while traveling across our property; *Bottom Image*: A sedated cougar is fitted with a GPS tracking collar for further study; *Opposite Page:* Paw size comparison**

This catch and release project, overseen by Bart George (wildlife program manager for the Kalispel tribe), is part of an ongoing effort to help mitigate future human-wildlife conflict as well as better understand cougar movements across the landscape. The study is in its final year, with information collected from at least 30 different animals. The goal of the project is threefold: to keep people and their livestock safe from cougar depredations, to provide a useful tool for wildlife managers across the nation who are dealing with cougar problems, and to protect cougars from agency lethal removal by conditioning them to avoid people and their homes. Essentially, the project works as follows: in cooperation with the Washington Department of Fish & Wildlife (WDFW) and local law enforcement, cougars that have been seen and called in by members of the public but who have not yet caused depredations are captured and fitted with GPS tracking collars. Once the animals are collared, they are monitored for 6 weeks, and during that time the cougar is "hazed" different five times. During a hazing procedure, the cougar is located via the GPS collar. A small speaker broadcasting a podcast with human voices at 80 decibels (roughly the same volume as someone's "outside" voice) is used, and the cat is approached. When the cougar begins to move away from the sound of voices, its location is closely monitored. Once the animal stops moving, trained hounds are then used to tree the cat. The hope of the hazing procedure is to strengthen the urge to stay away from people through negative reinforcement.

In my home state of Washington, you can no longer legally hunt with dogs, so when my wife and I were given the chance to participate in a mountain lion catch and release study utilizing hounds, we dropped everything we were doing in order to participate. This capture program is part of an ongoing study to better understand cougar movements across rural landscapes and potentially help mitigate future human-wildlife conflicts. The project is run by the Kalispel Tribe under the supervision of lead biologist, Bart George. Due to the importance of the scientific data being collected by this study, Bart had received special permission to utilize hounds to help track the cats. This was one of the few opportunities that would allow me to have the chance to see what a hound hunt was like, even if the results were vital scientific data as opposed to a freezer filled with meat. That morning, Bart texted us a waypoint via OnX Maps and some directions to park at a house near where the cougar had been seen. The message was clear: *Come Now*. Cougars have an enormous home range (up to 150 square miles), so locating them can be incredibly difficult. Therefore, once a cat is found, the need to act quickly is of utmost importance. Capturing a cougar isn't something you can schedule in your iPhone calendar.

Making sure we had warm clothes and some basic equipment (a canister of bear spray being top of the list), we raced out of the house and headed over to the GPS waypoint as quickly as possible. By the time we arrived, the cacophony of excited baying informed us that the hounds were already in the process of treeing the cat. The racket and the energy felt like a physical force in the woods. Peering over the edge of a steep mountain face, we had a general idea of where the action was centered, though we couldn't see anything through the trees. Shrugging our shoulders, my wife and I began picking our way carefully down the steepest slope I have traversed in years. Stopping for a moment to catch our breath on the way down, we suddenly saw a burst of movement and a tawny shape go bounding through the woods below us. My brain quickly sorted out that the shape was most definitely feline and not canine. I admit that up until that point I had been trying not to get my hopes up for seeing a mountain lion. I know that, even with the use of dogs, your chances of finding a cat are by no means assured. Yet here was a real live mountain lion in plain sight, running just yards below my perch on the steep slope. The most impressive part was that the cat didn't even make a sound as it galloped through the brush. The sight of it was absolutely exhilarating!

Once my wife and I had verified that the cougar was far enough away from us to continue safely coming down the mountainside, we linked up with the team of biologists, law enforcement, and conservationists that were involved. "Where did you come from?" Bart asked. Pointing back up the slope, I replied, "From up there." I'm not sure if he was more impressed with what he deemed our temerity or our lunacy, but in either case it seemed we made a favorable impression. Introductions were made all around. Bart put a prepared GPS tracking collar in my hand and told me to follow two of the team members to the cat that they had just darted prior to our arrival. "Don't worry, you can't lose it," he told me. Bart definitely has a well-developed sense of "dad humor" that I can get on board with. On the way over to the cat (which involved scrambling down more steep mountain slopes), I managed to learn some tips about mountain lion tracking from the guys who do this for a living. At one point, I made the comparison to morel mushroom hunting – you need to see one first before you can develop that sight picture in your mind. As I developed my own sight picture of the cougar tracks, I found that I was soon able to follow them unaided as well (though not nearly as quickly or with the insight that experience had taught the other two men). Through thick trees and steep terrain, we tracked this cat for several hundred yards, beginning to question the efficacy of the tranquilizer drug that it had received. Eventually, Greg noticed a paw print with a drag mark in front of it, meaning that the cat was starting to slow down as the drugs took effect. "I haven't seen him do that yet," he remarked, and I was impressed with Greg's ability to key in on those subtle details. Just a few yards later, we found the cat asleep, lying sprawled over a large tree limb.

This Page, Top Image: A sedated cougar is about to be fitted with a GPS tracking collar; *Bottom Image:* Cougar track in the snow; *Opposite Page*: Jillian Garrett helps to hold a cougar tail during measurements

Quietly, the team gathered around and began preparations for collaring the cat. Everyone marveled at the beauty of the impressive feline resting at our feet. Suddenly, we heard a wild turkey nearby. "There's a gobble!" one of the team members exclaimed, and several heads – my own included – snapped up in the direction of the sound. Normally, there is nothing strange or even noteworthy about a bunch of hunters getting excited over a fired-up tom, unless you consider that we were all standing around a much bigger, furrier, toothier tom. The fact that we had a sedated 137-lb. mountain lion at our feet and we all still got distracted by a gobbler says a little bit about the mental wiring for those of us who love the outdoors. Also, the fact that it was November, and these birds were acting like it was still April, was part of the appeal. But back to the cougar...

Cougars are still somewhat conscious during the sedation process. To help keep them calm, they need to be masked once they are fully sedated. As the de-facto assistant, I was told to fish out a mask from the enormous multi-pocket backpack that one of the biologists had brought. "Which pocket?" I asked, receiving the answer "one of 'em," and spoken without a smidgeon of sarcasm. Any hunter, backpacker, or apparently biologist, has probably experienced this sort of moment with their gear. I rifled through the pack and found nothing. Taking off my First Lite wool neck gaiter, I handed it over with a statement of, "This'll work."

We took measurements of the cat, including body length and paw size, and fitted it with a tracking collar. My wife was allowed to help with the paw measurements and was put in charge of holding the cougar's tail during the rest of the procedure. Her face could barely contain her grin. Of course, we also took a bunch of pictures during the entire process. The team kept inviting me to pet the cougar, but I found myself oddly reluctant. I love animals, whether I am hunting them, observing them, or just thinking about what they may be up to. This cougar was right here in front of me, so why not go ahead and touch it? Those paw pads looked awfully soft...Yet it wasn't fear of the cat waking up unexpectedly that stopped me (that being said, if you are ever next to a large, sedated predator, I challenge you not to question the efficacy of the drugs with every twitch of their supposedly tranquilized body). My reticence came from the fact that these are normally such secretive animals, and I have unsuccessfully tried to hunt them for years. Now here was one located right at my feet, drooling on my neck gaiter, and making the leap from mythical to real creature in my head. It was difficult for me to wrap my brain around it. After watching the team members handle the cat for a bit, I was finally able to overcome my shyness. I couldn't help being particularly drawn to the paw pads, which were softer and so much bigger than you would expect them to be. The other noteworthy observation I made was that the cat did not smell – there was no scent other than a hint of tallow from the deer he had killed and eaten yesterday. Here was an animal that had no scent and made no sound while moving across the landscape, with a coat that perfectly blended in with his environment. No wonder he was a much better hunter than me.

After the various measurements were taken, and the GPS tracking collar attached, it was time to reverse the drugs and allow the cat to wake up. I stood within a few feet of the animal while it came to, and watched him stumble to his feet and methodically slink off into the trees. I filmed a small portion of that experience, wanting to share the interaction with others in the hopes of helping people understand how important this sort of work is. Eventually, I put my camera away, not wanting to view this creature through the screen of my phone. Using just my eyes now, I committed this experience to memory, knowing it was something I would never forget.

The biologist handed my neck gaiter back to me, now thoroughly saturated with cat drool. I shoved it in my pocket, and, with a cold wind tickling my neck, headed back with everyone towards the parked vehicles. The hike back was filled with conversation about fishing spots, bear sausage recipes, cat biology, wildlife politics, and the visual, scientific, and spiritual journey that nature has to offer. Ultimately, I came away as deeply impressed with the people involved in this study as I was with the cat itself. When you get a group of knowledgeable outdoorspeople together, the desire to help one another, and to share wisdom, is overwhelming. The same way that we are intrinsically drawn to a campfire, we are also drawn to each other. The social nature of humankind runs deep in us all.

I will never forget that day or that experience. I hope to get to do it again, and soon.

The Magic & Mystery of Morels

By Jillian Garrett

There are some days that can be immensely frustrating, where nothing seems to be going smoothly and you feel as though you are fighting the universe. These are the types of days where even the smallest joy is a welcome celebration that manages to help turn the day (and your mood) around.

Today was that day on all counts. A frustrating morning spent fighting with the construction of a deer fence led to a calm-down walk around the western section of our property. During this mellowing meander, a chance glance at the ground revealed the most unexpected of prizes: morel mushrooms! I say "unexpected" because these mushrooms were growing in a location that I never would have guessed to find them, a place almost barren and boggy and in the middle of a large open meadow.

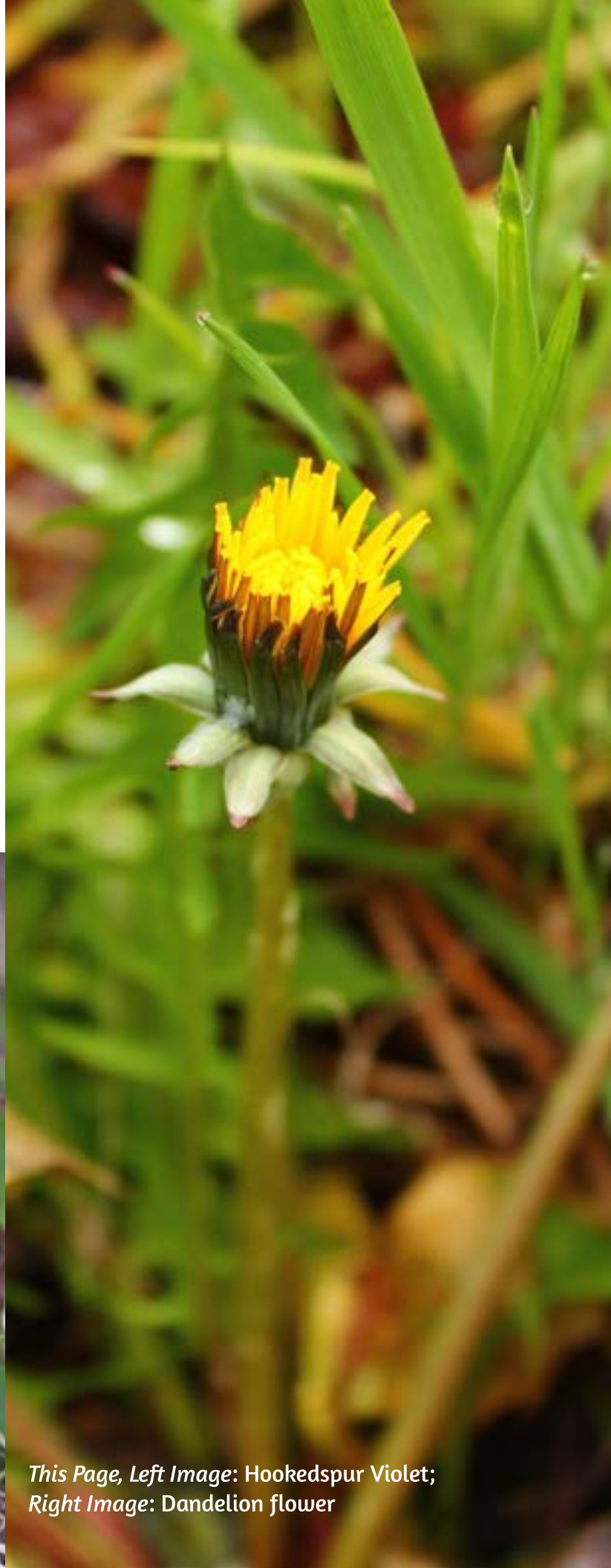
The mushrooms were next to my favorite tree on the property, one that I find almost magical in appearance. It has a history that I can only guess at, though clearly I am not the only person to see its value. It is the one tree on the entire property that has been fenced (however long ago) to protect it from damage by cattle and other animals. This single tree has survived and thrived, growing tall and proud on its own in our large western meadow, watered by the small spring-fed creek, and providing safe haven for the local wildlife who congregate around it in daily droves. Maybe it *is* a magical tree, as it has managed to provide a home for these most sought after and highly elusive mushrooms. Not only were these the first morels we found since moving to Washington, but they were the first morels we had found on our property.

It was truly a joy worth celebrating, and we returned to the house with hands full and souls happy. The deer fencing may still supply us with a frustrating challenge, but the land has continued to provide us with a delightful bounty. It has reminded us to celebrate something every day, and to never forget how blessed we are to call this place home.

Tips for Finding Those Mysterious Morels

Our native Hookedspur Violet is one of several excellent indicator plants for finding springtime morels, particularly the blonde mushrooms. When you see these flowers in the area, it may be a good time to start searching for mushrooms. Other indicator species can be dandelions, snowberry bushes, and wild strawberries. The mushrooms in our area appear to love edge habitat, with the black morels preferring a bit more shade while the blondes love sunny slopes at the edge of the forest. Every ecosystem is different, and what works to find mushrooms in one area may not work in others. Sometimes, the best way to discover morels is to simply go for a walk and keep your eyes on the ground.

Happy Hunting!



This Page, Left Image: Hookedspur Violet;
Right Image: Dandelion flower

This Page, Top Image: A freshly picked morel mushroom; *Bottom Left Image*: Scanning the ground for mushrooms; *Bottom Right Image*: Close-up of Hookedspur Violet flowers

Fresh Morel Pasta

This simple recipe utilizes fresh ingredients to make the gift of foraged springtime morel mushrooms shine. The pasta is the easiest type, comprised only of flour, water, and salt. You can add an egg to the pasta dough for richness but, given the copious amounts of butter used to cook the mushrooms, we recommend skipping it so that the dish does not end up being overwhelmingly heavy.

INGREDIENTS

For the Pasta
1 cup flour
A pinch of kosher salt

For the Topping
A handful of fresh parsley, oregano, and thyme leaves
Shaved parmesan cheese

For the Mushrooms
Young garlic, peeled and minced
Shallots, peeled and minced
1 cup of cleaned fresh morel mushrooms, sliced in half lengthwise
1 stick (1/2 cup) of unsalted butter

DIRECTIONS
To make the pasta dough, combine the salt and flour and pour it into a pile on your counter. Make a depression in the center of the pile, and – using a fork to mix everything together - begin adding in very small amounts of tepid water. You want just enough water to begin mixing the dough (roughly 6 oz. of water per cup of flour). You will know you have the consistency right when you can knead the dough like a loaf of bread (it shouldn't stick to your fingers, and it also shouldn't crumble). Knead the dough until it is smooth and springs back a bit when you dent it with your finger. Place it in an airtight container and allow the dough to rest for at least 30 minutes. This rest time is important because it allows the flour to hydrate and the gluten to relax.

While the dough is resting, use a knife to chiffonade the herbs. Mix the herbs with some shaved parmesan. Set this mixture aside.

After a 30-minute rest period, remove the noodle dough from the container and separate it into 2 to 4 different pieces. Roll each piece of dough out as thinly as possible on a lightly floured surface or with a pasta press. To cut the noodles, tri-fold each flat sheet of noodle dough (with flour sprinkled between the layers) like an envelope, and use a sharp knife to slice the ribbons of pasta to the desired width. Use your fingers to gently tousle the noodles and break them apart so that they do not stick together. Place the noodles in a loose pile on a baking sheet until you are ready to cook them.

Bring a pot of water to a boil and cook the noodles in it for a minute or two, or until the noodles float back to the surface. Drain the noodles into a colander.

Place the morel mushroom halves, along with the minced garlic and shallots, in a pan with the butter. Sauté' this on medium (or even medium-low) heat until the mushrooms are tender and cooked. To brown the butter during this process, stir constantly but slowly. Turn off the stovetop, add the noodles back into the pan, and mix everything together to help infuse the flavor of the mushrooms into the noodles. Remove the pan from heat and serve the noodles nested in a tight ball and sprinkled with the herb-parmesan topping. This is a delicious and simple way to enjoy a springtime bounty of mushrooms.

Easy Noodle Bowl

This dish is simple to throw together with a few kitchen staples and is perfect for those summer days when it's too hot to turn on the oven. For the carnivore in your life, we recommend adding marinated venison paunch or seared venison backstrap.

INGREDIENTS
1 package of Udon (or any wide wheat) noodle
1 onion, peeled and sliced into ribbons
2 cloves of garlic, peeled and thinly sliced
1-2 carrots, cut julienne
A generous amount of thinly sliced red or white cabbage
High-temperature cooking oil (peanut oil is a good choice for those without allergies)

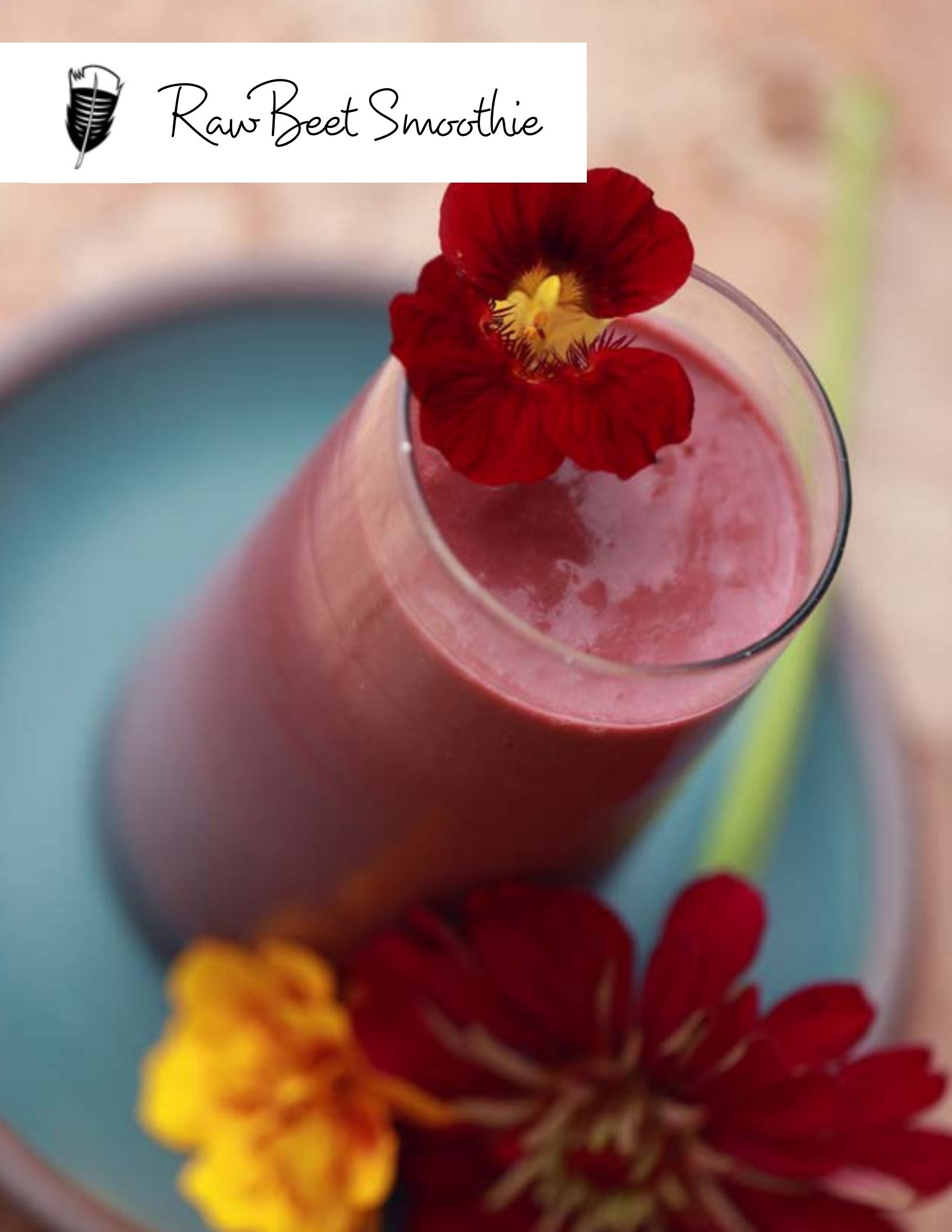
For the Sauce
3 tbsp fish sauce (we recommend Red Boat brand)
1 tbsp low sodium soy sauce
1 tbsp ground ginger
1 tbsp black sesame seeds

Cook the noodles in boiling water (according to the package directions) until they are done but still firm. Drain the noodles and place them in a bowl of cold water.

In a big cast iron pan or wok, sauté the onions on medium heat until they start to become translucent. Add the garlic and cook for a minute, then add the carrots and cook for a minute more. At this point add the sliced cabbage and pour the sauce over everything while stirring vigorously. Most of the sauce will scorch to the pan but don't worry about that too much. Once the cabbage is cooked but still firm, grab the noodles out of the cold water - making no effort to fully drain them - and stir them into the mix. The water hanging onto the noodles will de-glaze the pan and work the sauce back into the mixture.

Serve immediately (garnish with chives).

Raw Beet Smoothie



INGREDIENTS

3 to 4 small beets, peeled and chopped
Roughly 1 cup beet greens
Roughly 1 cup berries*
1 can organic coconut milk
Dollop of local honey

*We use a combination of fresh raspberries and freeze-dried strawberries, but feel free to experiment.

DIRECTIONS

Puree all ingredients together until smooth. Serve room temperature or chilled. This makes for the perfect summer sipper while relaxing on the porch!

Variations: Roast and peel the beets and use huckleberries.

Feeding the Soul

Creating art through photos

Most of us are familiar with the concept known as "work-life balance," even if few of us are relatively successful at it. When you are a work-from-home entrepreneur and farmer, the concept becomes even more difficult (if not downright impossible).

Of the many valuable life skills that farming teaches you, the most important is, "keep working until it's done." Unfortunately, on a farm there is *always* work to be done and projects to finish, so, if you are not careful, you will find yourself working nonstop 365 days a year. This is a dangerously easy trap to fall into, and one that we have often found ourselves teetering on the brink of.

As winter phased into spring and then into summer, I realized that I had not taken the time to do anything but the most perfunctory photography – a few quick photos taken here and there and then my camera immediately put away and forgotten about. I had not fed the artistic part of my soul and it was beginning to wither away like an untended garden flower. In short, I needed a break from work. I needed to feed the other part of me, the one that enjoys the colorful and tactile side of the world. So, I made time. The results were not only beautiful, but they helped restore me on a level that I did not realize was lacking until that moment. I learned an important lesson: *always make time for art.*

To order photo prints or book a photography session, please email info@blueridgefarmer.com

A Year in Review

This Page, Top Image: Freshly-baled hay rests in the pasture; *Bottom Image:* Monty the farm corgi enjoys playing in the snow; *Opposite Page:* The new high tunnel greenhouse in all of its summer glory

Winter is a time of reflection, when we take the opportunity to look back over our accomplishments for the season. Every year brings further progress and infrastructure, making our quality of life and our farming that much better.

This was the first year that we were able to begin growing vegetables in our 30'x72' Rimol high tunnel greenhouse. Surprisingly, it held up quite well to the heavy winter snow loads, laughing off one storm in particular that dropped a foot of snow overnight! We stayed in excellent shape shoveling snow off the sides of the structure after every storm, which was a bonus when the busy spring farming season arrived. At the beginning of summer, we were able to install drip irrigation, circulation fans, grow lights, and a revolutionary system of trellising inside the high tunnel, all of which allowed us to harvest more than 1300 lbs. of ripe tomatoes (plus hundreds of pounds of winter squash and peppers) in a climate whose growing season is frequently 90 days or less. We trialed several different varieties of heirloom and open-pollinated vegetables, selecting for those that matured in a short season without sacrificing flavor.

This year – despite numerous equipment failures and supply-chain shortages – we were able to begin haying our own fields for the first time, managing to put up over 10 tons of hay from our two smaller pastures alone. There is a deep sense of pride that comes from being able to sustainably feed yourselves and your livestock from your land. Next year, we hope to begin offering our regeneratively-grown hay for sale, in both round and small square bales. Being new to the haying process, the learning curve was a bit steeper than expected, and we were indebted to our neighbors for their patience and expertise in teaching us. We had never realized quite how complicated the procedure could be! This is one of many instances I think about every time someone tells me that farming "isn't a real job" and "doesn't require skills."

When we first moved to this property, we had soil samples taken from the various hay fields, and the results demonstrated how glaringly deficient the land was in nitrogen. The property had endured years of extractive haying and overgrazing, and as a result, the soil was leached of vital nutrients. We are committed to combating this problem through no-till regenerative agriculture in addition to intelligent rotational grazing. As part of that process, we are currently putting the finishing touches on a heavy-duty mobile chicken coop (nicknamed "The Bok Box"), which will aid us in returning nitrogen to the soil. Our flock of poultry will benefit from a free-range diet, and the resulting eggs will be far healthier and more flavorful than anything you can purchase in the grocery store. We are excited to put this plan into action next spring!

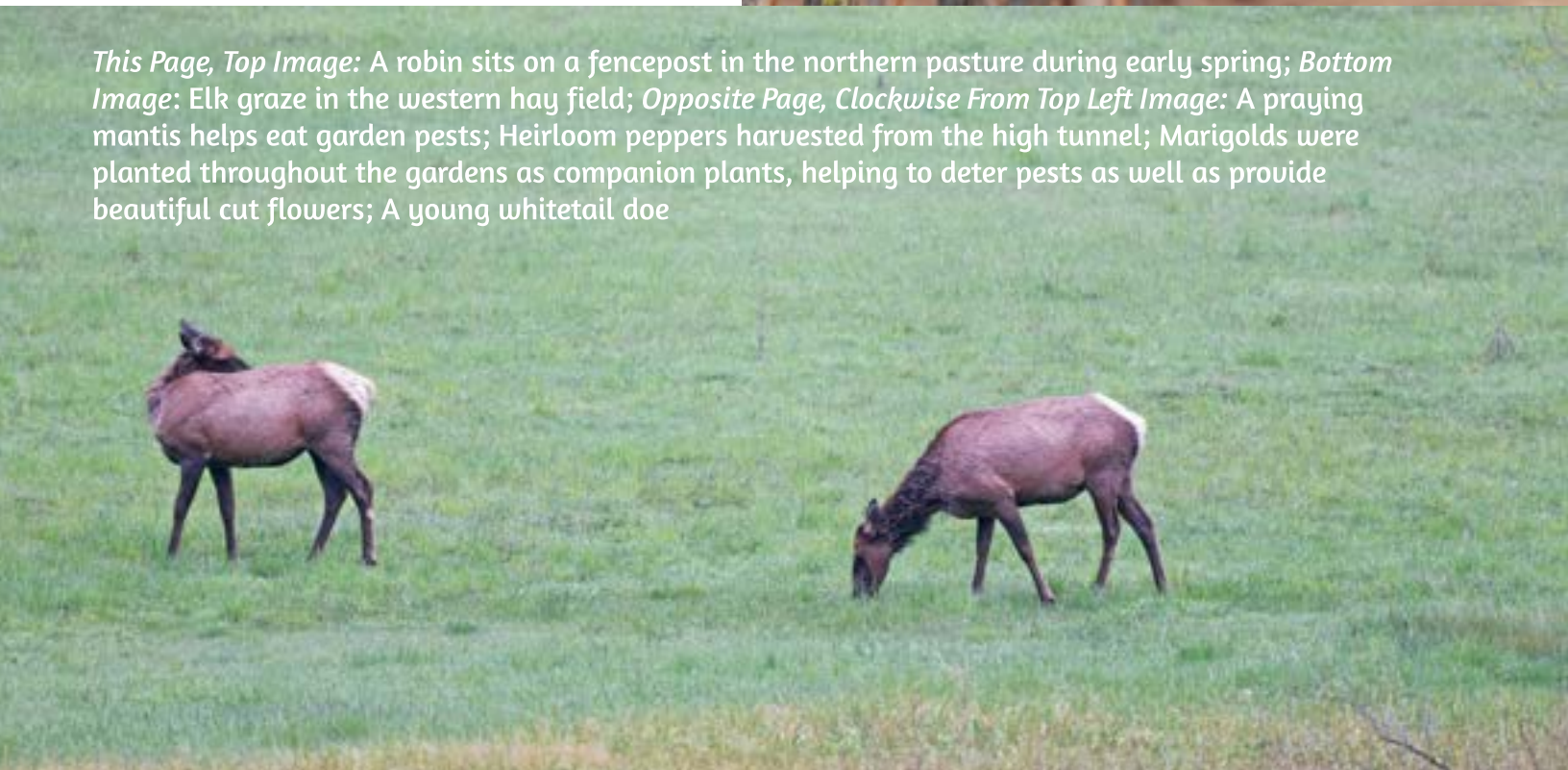
This year saw the construction of a smaller second (solid polycarbonate) greenhouse, which will be used for both seed germination and wintertime growing. We are incredibly excited to no longer be relegated to the cramped and shadowy hot tub shack for springtime seed germination.

Earlier in the year, we added a second outdoor garden plot adjacent to our high tunnel greenhouse, which allowed us to grow a large crop of cool season greens as well as a huge hedge of flowers for the purposes of attracting pollinators and other beneficial insects. We released numerous batches of green lacewings, ladybugs, and praying mantises during the growing season and watched their populations build and control the "pest" insects that preyed on our plants. Aphids were not a problem this year, though we continued to battle gophers and wireworms.

We were blessed with a wetter, colder winter and spring, which, while a challenge for getting the summer garden growing, allowed us to enjoy relatively clear skies and less of a scary wildfire season later in the summer. We saw a drastic increase in wildlife - elk and whitetail herds, cougars, black bears, wolves, bobcats, coyotes, turkeys, grouse, and more – some of which can be viewed in our selection of favorite trail camera photos following this article - and I like to believe that our efforts at land stewardship were partly the reason.

There are only so many working days and hours in the year, so some projects had to be put on hold until the snow-free months of 2023. Construction of the large berry garden and commercial kitchen have had to wait, but they will be finished in due time, along with a sheltered parking area and additional hay storage. In the meantime, we can look back on all that we have still managed to accomplish this year and take pride in our endeavors. Mountains have been moved with less effort! We have so many hopes and goals and ideas for the coming year, but one goal sticks out above the rest: remembering to take the time to relax, sit back, and appreciate all that we have accomplished. There is so much to be thankful for!

This Page, Top Image: A robin sits on a fencepost in the northern pasture during early spring; *Bottom Image*: Elk graze in the western hay field; *Opposite Page, Clockwise From Top Left Image:* A praying mantis helps eat garden pests; Heirloom peppers harvested from the high tunnel; Marigolds were planted throughout the gardens as companion plants, helping to deter pests as well as provide beautiful cut flowers; A young whitetail doe

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A Lesson in Extremes

Our section of Aladdin Valley is in a decidedly colder microclimate. There is no weather prediction service that can ever seem to accurately forecast what will happen here one day to the next, and generally our location tends to be colder and snowier than anywhere else in the area. This place is a land of extremes. We may not be climate scientists, but as small farmers, we do think it's wise to collect and analyze our weather data as a tool to help us better grow crops here. Over the years, we have invested in an array of weather collection instruments, and they have proven invaluable in helping us make important decisions on the farm.

Even a simple compilation of temperature data for 2021 vs. 2022 gave us quite a few insights. For example, 2021 was truly a year of extremes (and that is saying something for here!). On June 29th, the farm reached a scorching 108 degrees F when a high-pressure dome sat over our area for days on end. Yet during that same growing season, we also saw an unusually cool daily high temperature of 57 degrees on June 6th. These two weather events occurring in the same month should illustrate how hard it was to know how to dress for the day. Thankfully, 2022 proved to be significantly milder.

Another useful data point involved the first and last frost dates for the growing season each year. In 2021, the last frost date occurred on June 11th, yet the last frost date in 2022 was May 22nd. The first frost to end the growing season happened on September 2nd in 2021, and on September 9th in 2022. This meant that our growing season in 2021 was almost 25% shorter than 2022. The contrast between the two years becomes even more striking when you factor in the number of days in the growing season that were greater than 90 degrees F (which is the temperature threshold that tomato plants stop fruiting). In 2021, there were 43 days of 90 degrees or hotter, with only 32 days in 2022. **When you factor all of this information together (frost dates, heat waves, etc.), we only had 40 days of ideal growing conditions in 2021, versus nearly double that (78 days) in 2022.**

What does this mean for our farm? Most importantly, it illustrates the clear value of having greenhouses that allow us to not only extend our growing season but also help to moderate some of the higher temperatures through the use of circulating fans and shade cloth. Without these tools, we would have been faced with much more uncertainty of success each season. Though we would need more long term data before being able to make any comprehensive observations, even the small amount we have collected is a huge step in ensuring our success at farming in an extreme landscape.

Farming in a Unique Microclimate