Introduction: My Story

"Buried among the things we hate is a class of products that are in that class only because they are weird. They make us nervous. They are sufficiently different that it takes us some time to understand that we actually like them." MALCOLM GLADWELL, BLINK

imagine a bit of eye-rolling when people come across this book while looking through titles on farming, gardening or self-sufficiency at a library or bookstore. I admit that on the surface it might look like a glorification of Luddites or perhaps some kind of gimmick, but my aim here is to present what I have come to see as a perfectly legitimate and reasonable choice for homeowners, farmers and others who are looking to save money, reduce their use of fossil fuels, be less dependent on industrial products, take better care of their land, increase their autonomy, get to know their bodies and land better, and stop using noisy, dirty machines.

Here's how I got into working with scythes and why I think your life will be better when you start using one. My first significant exposure to a scythe was an indirect one. In the late 1990s and early 2000s, I was a transplant from Iowa to San Francisco in my twenties, trying to get a music career going. Young and on my own for the first time, it was important for me to show the world that I was

in charge of my life, and one of the ways I set about doing that was to get tattoos. After getting a couple, one of which I liked, the other not so much, I got an idea for the perfect tattoo: I knew that at some point in my life I had seen woodcut art of people working in fields with hand tools. With this vague notion in mind, I started spending weekends at the public library, poring over art books in hopes of finding such an image. After more than a year of looking and finding nothing that spoke to me, I pretty much gave up on it.

Around this time, after a few bad band breakups and lots of wheel-spinning, I became disillusioned about playing music for a living and fell in love with the idea of becoming an organic farmer. Despite having grown up in Iowa, typically the state with the highest corn production in the US, I had neither experience nor any connection with farming or gardening, so I started looking at the public library's selection of books on these subjects. One day I typed the words "agricultural technology" into the library's search engine, and the book

Dream Reaper by Craig Canine came up. I found it on the shelf, started leafing through it, then said, 'Wait a minute!' and looked again at the front cover. It was a woodcut of a man cutting a grain harvest with a scythe. That was it - just the image I'd been looking for over the last two years. A few days later, I had it on my arm and had learned from the tattoo artist how to pronounce the word "scythe". That was late 2001. The path to becoming an organic farmer that I figured out for myself was to go back to college, so I studied agroecology at UC Santa Cruz. As a result of that course, I did an internship on a biodynamic farm in south-central Austria for six months in 2005. Within the first few days of being there, I saw their scythe hanging in the workshop and I immediately knew I had to learn how to use that thing. I tried it out a few times, hacking at some weeds, having no idea what I was doing. My only points of reference were swinging a baseball bat or a golf club, neither of which are relevant to using a scythe. I would quickly get tired, and very little of what I swung at was actually cut. I had no doubt that there was more to it than meets the eye, but I couldn't imagine how to use it more effectively. However, it didn't take long to realize that there is practically no such thing as a farm without a scythe in Austria.

That summer, there was a Romanian worker on the farm. Florin was a year my junior, but he was light years ahead of me in terms of experience on farms. He could do everything. I used to wake up to the sound of a whetstone sliding across the blade in the early morning before he mowed grass for a small flock of sheep whose paddock had too little forage. Florin seemed to put almost no effort into mowing a surprisingly large amount of grass.

Before I knew it, the internship was over, and the only scything experience I got were those few times breaking a lot of sweat to cut very little grass. After graduating, I returned to the farm in early 2006, and in spring 2007, I discovered that there was an organization that offered tuition in mowing with the scythe. I took a half-day mowing lesson, bought a scythe (which I still use today) and talked neighbours into letting me mow their apple orchard, which was at least 1 acre (0.4 ha) large. It took me about a week, as I recall, but I mowed the whole thing, feeding the daily harvest to their pigs.

While in Austria, I fell in love with the whole-grain rye sourdough bread that we ate every day at the farm. I learned how to bake it and eventually started to dream about growing and harvesting grains using only hand tools,



The use of the scythe has never died out in mountain areas. Now urbanites, permaculturists and others by the thousand are rediscovering the efficiency and usefulness of this remarkable tool.



then baking bread with the grain and selling it to earn my living. A move back to my native Iowa in late summer 2007 provided me with the chance to do just that.

While on what was intended to be a two-week visit to Iowa in August 2007, I drove up to Decorah to visit Seed Savers Exchange, a non-profit organization dedicated to maintaining heirloom vegetables. On a whim, I decided to take a résumé along with me, fully expecting that there was no chance of getting a job at a well-known place with such a great reputation. To my surprise, they were interested in me, so I took a job with Seed Savers and while there met an older homesteading couple, back-to-thelanders from the 70s, who were intrigued by my ideas and said I could try them out on their land. I bought Kiko Denzer's Build Your Own Earth Oven. followed the instructions therein and started baking bread and selling it at the farmers market. Not too long after that, I had a neighbor plow and seed 1 acre (0.4 ha) with rye and ½ acre (0.2 ha) with spelt.

Around July 2009, it was time to harvest. I had been at the farmers market for almost a year at that point and wasn't getting rich, but I was selling everything I could bake. Now I was finally going to realize the last piece of the dream.

I had engaged the help of a local woodworker to build a grain cradle for one of my scythes. This is an attachment designed to gather the cut grains and lay them on the ground in an orderly way for easy binding. Mine was one of the big rake-style cradles that I knew from pictures from the Depression. So there I stood on a cool, dewy morning at the edge of a field of rye, about to start harvesting with the most traditional equipment you could imagine. I even made a short video, where I said something like "Today is the first day of the rest of my life." It really felt like an important moment for me, and I reflected on how long it must have been since small grains had been harvested with a scythe in Winneshiek County, Iowa. Then the first swing: the whole thing, blade and cradle, lodged in the dense stand of rye stalks. Okay, think about it, make a few adjustments, try again. Same result.

No matter how hard I tried, there was no way to move the scythe through the grain without everything getting tangled up. I changed the angle, changed the placement, changed the length – nothing helped. My dream was crumbling before my eyes.

A day or two later, I contacted Botan Anderson, a fellow scything enthusiast in Wisconsin who imports the top-quality scythes from Austria that I use. He mentioned a two-stroke technique that he had developed, where the first stroke cuts the grain, then a second stroke in the same spot collects the grain and sweeps it to the ground on your left. I tried it the next day . . . it worked! It took three days and I had some help from friends who came to tie bundles of grain into sheaves and lean them into each other to form stooks for curing in the field. Finally, I had my harvest.

A large garden or small farm without a scythe almost guarantees extensive use of gas-burning machines such as strimmers, lawn mowers and tractors. As I see it, the only reason not to have a scythe is if you are unaware of their existence, their purpose and how pleasant they can be to use. I no longer grow enough grain to sell bread for a living, but I still grow grains for my own use and make hay by hand.

Through chance, curiosity and concerted effort, I have learned a lot about scythes and scything, and I'd like to share this knowledge with you here in the hope of inspiring as many of you as possible to choose the right technology to help you meet all your needs.

Unless I indicate otherwise, when I use the word "scythe", I am referring

to a forged Austrian scythe (sometimes called a European or continental European scythe). There are hundreds, if not thousands, of designs for scythe blades, and there is a fair amount of variety even among Austrian blades. American and English scythes are stamped (and thus not possible to peen), and were developed to harvest

sugar cane and reed and are therefore not suitable for hay and small grain harvesting.

The directions on using a scythe are given for right-handed people. If you are left-handed and using a scythe built for mowing left-handed, simply reverse them.

Ian Miller

CHAPTER I HOW SCYTHING ALL CHAPTER I HOW SCYTHIN

Imagine a town or suburb where nobody has a lawn mower. Walking along on a Saturday morning, from time to time you hear the sound of a whetstone being dragged across metal, a bit like a knife being sharpened, but duller, softer. Later in the day, you walk by again and see cut grass spread evenly across lawns and the occasional haycock, proudly displayed in the front garden, destined for pets and livestock, mulch for the garden or the compost pile.

ow imagine a cluster of small farms where nobody has a tractor. On most days during the growing season, farmers wake up to milk their animals and move them along to the next paddock. But first, before the morning dew has evaporated, they grab their scythes, hone them and do an hour or so of mowing before spreading the grass out to cure and collecting some for the animals to munch on during milking. That evening the farmers hang the grass up on a quadripod or Swedish-style wire rack so that water is shed should it rain. In a week or two, depending on the weather, the finished hay is loaded onto a cart and dumped into the hayloft in the barn, to be dropped down to livestock as needed over the winter.

In midsummer, a patch of small grains, maybe up to 1 acre (0.4 ha) or so, is cut, bound and stooked by these farmers, now working together, then threshed and winnowed a few weeks later with a treadle-powered thresher they chipped in to buy together.

Undersown grasses and clovers then take over the patch, returning it to meadow.

Animal impact, mostly from pigs, establishes the seedbed in the next acre of

meadow for the following year's crop of small grains.

The scythe and the techniques involved with it come from traditional Alpine farming, which is based on local production for local needs. It improves the soil, increases biomass, prevents erosion and makes for extremely high-quality foods. It involves meaningful work that is creative, challenging and invigorating. In an age where climate change is upon us, the scythe is a technology that is relevant and useful to us all.

At this point, you might think that if it is so easy and pleasant to make hay and grow grains yourself, why aren't more people doing it already? One explanation is the ubiquitous assumption that the latest, most high-tech solution is necessarily the best one. But, for example, the existence of cars doesn't mean that bicycles are irrelevant. Both are forms of transportation, yet they meet completely different needs. Replacing your lawn mower with a scythe is much like the experience you may have when choosing to ride your bike to work: exhilaration, rejuvenation and increased energy and confidence.

What Will I Use My Scythe For?

A scythe can tackle a wide range of jobs efficiently, which means you may be able to dispense with a range of garden tools that aren't in everyday use. You can use it, for example, to mow grass in awkward places such as alongside walls and fences, or on slopes and wet ground that is inaccessible to heavy machinery. Once you have acquired the technique, a scythe is a joy to use and provides a wonderful experience for mind and body.

MOWING THE LAWN If you have a lawn to mow, you may only be familiar with these choices for getting the job done: a gas or electric lawn mower or a hand mower. They are generally effective, but are expensive and noisy. Gas mowers are also incredibly polluting, emitting more polycyclic aromatic hydrocarbons – probable carcinogens – than a car, increasing ground levels of lung-irritating ozone and emitting carbon dioxide.

To eliminate air and noise pollution, you can use a scythe instead to mow the lawn. You'll have to let your lawn grow longer than you may be accustomed to for the scythe to be effective, but this also means mowing less frequently. Make hay with the cuttings for backyard livestock such as chickens and rabbits, or use them as a mulch or in the compost bin.

MOWING A WILDFLOWER

MEADOW In prairie and wildflower plantings, the scythe can be used to remove problem plants (such as wild parsnip or the saplings of unwanted trees) without causing large amounts of damage either at the point of use or by bringing equipment in and out. Strategically timed, larger-scale mowings can help to encourage desired plants and discourage those that are not wanted.

MULCHING Ask a gardener who does not mulch why this is and the response is likely to be that they do not know what they would use, that it is too expensive or that they don't want to haul bales of hay or straw. Meanwhile their garden is in the middle of a free source of mulch, if they only had the knowledge and tools to tap into it. The benefits of mulching cannot be overstated. Mulch suppresses weeds and retains moisture, so you need to weed and water less; it covers the soil, thereby preventing erosion, hardpan and the splashback that encourages the spread of soilborne diseases; it insulates the soil, allowing you to keep root crops in the ground longer; and it ultimately adds organic matter to the soil.

Furthermore, being able to make your own mulching material for free makes it easy to use no-till gardening techniques such as sheet mulching, lasagna gardening or no-dig beds that require mulch and compost. Turning the soil is one of the worst things you can do to it as it mixes upper layers of soil into lower layers and vice versa. Different layers of soil have different forms of soil life, and you ultimately destroy soil organic matter and make hardpan more likely. By abandoning tillage and planting directly into a sheet mulch that consists of sheets of newspaper and/or cardboard applied directly to the top of the soil to kill and inhibit weeds plus compost, hay and/or straw on top of the sheet layer, you allow soil microfauna to aerate, loosen and fertilize the soil for you. This creates a win-win situation as it is much better for the soil and is much less work.

varying estimates of the carbon-nitrogen ratio of hay; they range from 25:1, which is in the ideal composting range of 25–30:1, all the way up to 50:1. In general, the more clover or other nitrogen-fixing plants in the hay, the higher the nitrogen content will be. For a diverse lawn, with perhaps fescue and some crabgrass, ground ivy, plantain and a little white clover, it's a safe bet that it's closer to 50:1. Hay made from a field of primarily alfalfa and/or red clover is probably closer to 25:1. Hay from your lawn piled alternately with food scraps and manure

from backyard livestock will make for fantastic compost. Note that dried hay has a significantly higher C:N ration than freshly cut grass, which is closer to 10:1.

MAKING HAY Hay is an under-appreciated resource for gardeners and small farmers, probably because it is thought of as something that is only made with expensive machinery in huge fields. The scythe is the original grass-harvesting tool, and it leaves the entire blade of grass intact above the cut from the crown of the plant. Grass cut in this manner can be dried in the sun and wind to make hay, which is incredibly useful for home gardening and for keeping backyard chickens or other livestock.

FEEDING LIVESTOCK AND PETS

Whether you have a few chickens, a horse, a milk cow or a small herd of goats or sheep, winter fodder and bedding can be the biggest challenge and expense. But if you are making hay from your own lawn by using a scythe, your hay is not only as local as it gets, it is also free. This means you can produce your own eggs, milk (and by extension butter and cheese) and other animal products of the highest quality for very little money.

GROWING GRAIN Small grains are an overlooked crop in the home garden and allotment as well as on small farms. If you are interested in grains other than wheat for baking your own bread, such as emmer, einkorn, spelt or khorasan wheat - all of which are more nutritious, though lower yielding, than wheat you'll be able to save money by growing your own. Your grain will essentially be free (think free bread and free chicken feed), you can control how it is grown (free of industrial chemicals, in a polyculture, with no use of fossil fuels, adapted to your local conditions), and you will have a deep-rooted, light-feeding addition to your crop rotation.

To achieve a worthwhile yield in the amount of space available in a home garden, you will probably need to maximize the yield per square foot. The highest yields possible – up to 50 lb (22.7 kg) from about 200 sq ft (18.5 m²), which is about enough for 1½ lb (700 g) of bread per week – are those achieved through bio-intensive gardening, which means growing grain in double-dug beds with lots of added compost. Or, if you have more space and don't need to have such high yields per square foot, you can use animals such as chickens or pigs to till and fertilize the soil for you.

At the field scale, small grains make for a perfect nurse crop for establishing a hay field.

producing straw When you grow your own grains and harvest with the scythe, you also get the long straw that is the seed stalk of the plant. Straw is an immeasurably useful product for the garden and small farm. It is a perfect "brown" ingredient for the compost pile, ideal bedding for livestock and an excellent weed-free mulch material.

GARDENING Whether you garden at home, in an allotment, a community garden or elsewhere, you can use the scythe for quietly performing many tasks with ease. Mow a stand of green manure; clear beds of vegetation; keep paths or border areas mown; and mow marginal areas near fences, gates or walls.

When you step back and look at all you could be doing with the scythe, it may suddenly seem like an indispensable tool for the home and garden. Using a scythe can certainly help you achieve a lot around your lawn, garden or meadows and at a speed that you might find surprising for a hand tool.