Plot 46: A Year of Regenerative Gardening

"The default mode of nature is regeneration." —Paul Hawken, *Regeneration: Ending the Climate Crisis in One Generation*

An Idea Takes Root

In the winter of 2022, I watched a documentary on regenerative agriculture. I am wary of documentaries — the way the narrator, breathless in anticipation, reveals the next world-rewriting segment. And indeed, in *Kiss the Ground,* Woody Harrelson, along with a stream of scientists and farmers, and a sprinkling of politicians and celebrity activists, reveal how the earth's soil may be the key to combating climate change and preserving the planet.

According to the film, agricultural lands around the world are nearing exhaustion and global food production is on par with the transportation and energy sectors as a major source of greenhouse gases. The movie tells us the solution to both depleted soils and climate change is right under our feet in the form of "regenerative agriculture," which advocates for widescale no-till pastoral farming where farm animals and food crops grow on the same land. *Wow!*, I thought. *Is this a plot to make meat-eating seem OK*?

I have been a farm animal activist-artist since 2011, using my art to draw attention to the cruelty of factory farming starting with a four-year project called *Pigs in a (Post) Modern World*. In 2015 I began another project called *Cattle in Print: The Changing Pastoral*. It was only during the second project that I discovered the link between the food we eat and climate change when I read the UN Food and Agriculture Organization's publication *Livestock's Long Shadow*. *Why isn't everyone talking about this?*, my inner dialogue screamed. I was supposed to be an environmentalist and farm animal advocate, yet this relationship was news to me.

Coming back to *Kiss the Ground*, I was hearing that cattle, and presumably other animal livestock, could be part of an agricultural system where the plough and its modern reincarnation, the tractor, could be abandoned, while at the same time growing crops, regenerating soils, and sequestering carbon. Wasn't this making the old pastoral and agrarian ways new again? Where have 6,000 years of agricultural "progress" gone? Didn't the Green Revolution in the latter half of the 20th century, with its promotion of hybridization, mechanization, and chemical fertilizers and pesticides, increase global food production and save millions from starvation? How could all those agricultural scientists, politicians, financiers, farmers, and just about everybody be so wrong? I answered my rhetorical question: *Money … and unquestioning beliefs in the myths of progress, unlimited growth, and technological solutions. Ahh…*

I started to dig into the subject of regenerative agriculture to learn whether it could be the remediation of generation upon generation of modern agriculture. In my preliminary research I learned that many agriculturalists, scientists, farmers, and community gardeners have been working to find ways to ensure the sustainability of our food systems, while at the same time attacking some fundamental causes of climate change.¹ Although not a silver bullet, soil experts Fred Magdoff and Harold van Es agree that "[e]cologically sound management of agricultural soils using practices that promote the buildup of organic matter certainly has a part to play in combating climate change" (Magdoff 25).

Digging deeper, a healthy soil food web seems to be the key to healthy soil, healthy food, healthy people, and perhaps even a healthy, sustainable planet. Jeff Lowenfels has written a very accessible book on the soil food web, which literally and figuratively brought soil alive for me.

¹ For example, *The Pastoral Song: A Farmer's Journey*, James Rebanks (First U.S. edition. Amsterdam: HarperCollins Publishers, 2021) describes his return to a more traditional mixed farming on his family's ancestral farm in England's Lake District.

Beth Shepherd

He explains that in addition to a mix of sand, silt, and clay, a healthy soil system must include sufficient organic matter to support a host of living organisms. These include microorganisms like bacteria, archaea, algae, protozoa and mycorrhizae, which feed on plant exudates, plant matter, and each other, thereby transforming and binding nutrients into the soil. The microorganisms are consumed by, or consume, larger organisms like nematodes, small and larger arthropods, earthworms, and even larger animals. These multi-directional food chains make up the soil food web, which plays an important role in many life-essential processes, including the nitrogen, carbon and water cycles. Maximizing the levels of organic matter in soils increases its ability to hold onto carbon thereby reducing the escape of greenhouse gases (Magdoff 4).

I have always been a gardener and I have spent many hours of backbreaking labour digging and weeding my gardens. For the last few years, I have confined my veggie gardening to containers, with limited success. I doubt the value of my harvest comes near to covering my production costs. Of course, there is the pleasure of picking your own cherry tomatoes or zucchini off the vines. But I am thinking about food security here.

In 2021 about 82% of Canadians live in urban areas (Statista). This is slightly lower than in the US and Britain at 85 and 86% respectively (Hawken, The City). Cities are dominated by concrete and cars. Farmland, green space, and vacant lots within or near cities are threatened by developers who are eager to snap up land under the guise of building more affordable housing.

In urban areas, most people shop at grocery stores where food often comes from far away. During COVID many people experienced a taste of food insecurity as supply lines were disrupted. Post-pandemic, food costs are continuing to rise and food security remains a concern given climate and political disruptions. Seeking healthy locally-grown food, home gardeners and people with community garden allotments know the joy of growing their own food. Other people April 12, 2023

4

may take advantage of CSA (Community Supported Agriculture) arrangements with local farmers or go to local farmers' markets. Unfortunately, few cities make local food security a priority.

The National Capital Commission (NCC) is the largest landowner and caretaker of public lands in the Ottawa area. Through protection of agricultural land, the NCC positions itself as a contributor to the regional food system. In their draft strategy, they promote sustainable agriculture with acknowledgement that organic and regenerative practices are preferrable. (NCC Strategy 14).

One of NCC's agricultural properties is Maple Hill Urban Farm located at 200 Moodie Drive in Ottawa. Leased in 2012 as part of the NCC's sustainable farmland program, it is a 167acre farm that provides sustainable food production as well as educating and sharing the benefits of naturally grown food through community gardens and community programs, such as the alpaca walk, seasonal markets, and a fall maze (Maple Hill Urban Farm website).

In 2017 I had a community garden plot at the Maple Hill Urban Farm but I injured my shoulder digging in the heavy clay soil and was forced to abandoned it after just one year. For gardeners and farmers, regenerative agriculture means not tilling the soil and not adding chemicals, but instead adding lots of organic matter. Assuming that no-till gardening meant I could garden without fear of injury due to digging, I put my name in for a garden plot in mid-February, 2022. In late April I was assigned plot 46, an abandoned and weed covered 40 X 10 foot patch of ground marked by wooden stakes.

Shortly thereafter I launched my eponymous art-science research-creation project. I consider the Plot 46 Project a kind of artist residency – where I can escape from my studio and immerse myself into a setting which offers a focus for research and opportunities for artistic creation and reflection. The project itself has three goals. First, I want to "return to the soil" to April 12, 2023

learn and practice regenerative agriculture or more specifically, a form of no-till gardening. Secondly, I want to document my progress through art and writing, and thirdly, I want to produce some wonderful food!

Regenerative agriculture is not a short-term undertaking. When I launched the Plot 46 Project in early 2022, I understood it to be a multi-year commitment. Each year I plan on drafting one part in an artist book, each part taking a different perspective on Plot 46:

Part 1 - A Pastoral Landscape, looking at Plot 46 through the seasons from the eyes of the gardener;

Part 2 – **The Underworld**, looking at members of the soil food web, and their roles in building healthy soils and in the water, nitrogen and carbon cycles; and

Part 3 - Weeds, Worms, and Other Colonizers, looking at Maple Hill Urban Farm and local agriculture from broader historical and cultural perspectives.

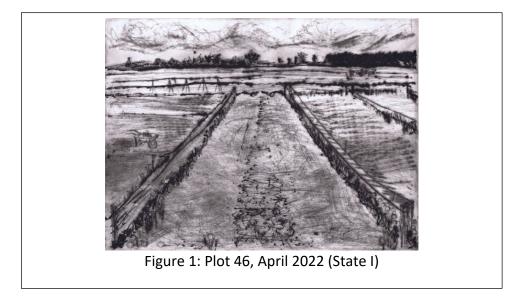
Plot 46 Year One: A Pastoral Landscape

"Gardens are one way culture does nature." —Rebecca Solnit, *Orwell's Roses*

Canada's national identity has long been rooted in the representation of its wilderness landscape, especially as depicted in the early 20th century Group of Seven paintings. Canada was glorified as an "empty" land, a source of unlimited natural resources there for extraction. Depictions of rural life in European-style pastorals were also abundant, especially among Quebec artists but they received less acclaim in a country looking for economic expansion and growth.

The pastoral has been a recurring theme since Antiquity, when it was used to tell complex tales of the pleasures, hardships, and disillusionments of rural life. Since the revival of classicism in the Renaissance, the pastoral has come to mean a set of literary and artistic devices used to broadly represent humanity's multifarious relationships with the natural world. Over the centuries it came to glorify rural or country life while minimizing or obfuscating the realities of modernization, hardship, and oppression. (Shepherd, Cattle in Print).

During the 20th century and to the present day, pastoral landscapes provide a quaint vision of a natural harmonious place synonymous with security, serenity, and simplification. Pastoral tropes are used extensively in popular visual culture, media and advertising to deny or disguise the horrendous conditions of the global agri-food business. By referencing the traditional pastoral landscape, I am giving an ecocritical nod to the longevity of the form but also drawing parallels with humanity's changing and problematized relationship with the land and nature, and our ongoing struggle for food security. To illustrate year one, I have completed a series of drypoint prints called *A Pastoral Landscape*. I created my first print in the series in April 2022 (Figure 1). I decided to use a simple traditional pastoral landscape with single point perspective because it reflected my point of view literally and figuratively: It is what I saw every time I arrived at my plot, and in the first year, it was my intent to look at regenerative agriculture through the gardener's (human) eyes.



After preparing the drypoint plate, I inked and printed it with traditional rich black ink on mould-made archival 320 g 100% cotton rag printmaking paper. All prints in this series have been printed on the same paper with oil-based inks at the Ottawa School of Art print studio in 2022 and 2023.

About Drypoint Printmaking

Drypoint printmaking is an intaglio method which means that the image is incised into a plate or matrix and when inked, it is the ink held in the incisions that create the image that is transferred to paper. Copper and Plexiglas plates are commonly used as matrices. To create the

image inscribing tools such as a stylus, scribe, Dremel, scrapers, or roulettes are used to cut lines or make marks on the surface of the plate raising a delicate burr. To make a hand-pulled print, the plate is methodically inked and wiped. It is positioned on an etching press bed and covered with dampened printing paper, and rolled through the press under considerable pressure. The resulting print exhibits characteristic velvety soft lines. Due to the delicacy of the burr, only a limited number of prints are possible unless the plate is specially treated or reworked.

A Pastoral Landscape is a series of prints made using a single Plexiglas plate as it moved through several states depicting Plot 46 as it moved through the seasons -- spring, early, mid and late summer, post-harvest, and first snow. To create a different state, I deliberately altered the plate by adding more incisions or later by adding acrylic mediums. (States are denoted in Roman numerals). Using multiple states in my series served two functions: it saved materials and effort, and it enabled me to reflect on the gradual transition of the plot as my garden moved through the seasons.

Spring

Keen to make a quick start on my project, I had not spent a lot of time researching the how-to's of regenerative gardening other than scanning a couple of websites and e-books.² Their main advice was to minimize soil disruption, keep the soil covered, use lots of compost and mulch, and avoid chemicals.

While waiting for the assignment of my plot, I ordered cherry tomatoes, jalapeno, hot Portugal and Hungarian hot wax pepper plants, and a variety of herbs from Richter's Herbs and Seed. I already had beet, radish, beans, peas, greens, and zucchini seeds on hand. As well, I had

² I regularly refer to two books: Bella Linde's No-Dig Gardening and Jeff Lowenfels's Teaming with Microbes.

started six collard plants in my window—these turned out to be very productive throughout the coming growing season.

I also ordered some bean seeds from the Secret Seed Cartel in France. I had heard a lot about delicious corona beans but I could not source the seeds in Canada.³ The corona bean (*Phaseolus coccineus*) is a traditional large heirloom Italian bean famous for its luxurious creaminess. They require a longer growing season than most beans so they may benefit from starting indoors three weeks before the last Spring frost. I was not successful in my attempt to start the seeds indoors, but they did grow when sown directly in the soil. I also ordered some Buenos Aires Roja bean seeds (*Phaseolus vulgaris*), more to avoid paying shipping than because I wanted them. Believed to have originated in South America, this bean is an early variety with flat green pods marbled with red that disappears when cooked. The Cartel website said they produce very tasty and tender bean pods and the dried beans can be used in soups.

As part of my initiation, the resident farmer had lightly tilled my plot and added a load of horse barn litter. Although contrary to the rules of regenerative agriculture, I was relieved to have the tangle of weeds and feral onions turned under. It would be no-till going forward. My first task was to get the plot covered. It had been a wet spring and the heavy clay was saturated with water. I laid strips of cardboard along my pathways, spread the barn tailings on top, and started hauling wheelbarrow loads of compost (provided on the farm) to lay on my beds.

By May 23, the day before the prescribed planting season in our region begins, my plot was ready. I had not prepared a planting plan and now felt a sense of panic to get things in the ground. I planted my collards at the far end interspersed with mounds of corona beans. I built

³ I first came across corona beans in the Sarno brothers' *The Wicked Healthy Cookbook*, 2018.

tepees for my beans out of branches. These were widely available because Ottawa had experienced the damaging winds of a derecho on May 21, which left trees and branches everywhere.

I planted the cherry tomato and pepper seedlings I received from Richters. I then planted seeds in patches along the borders of my plot. I always plant seeds too densely and when they germinate, I do not have the heart to cull them. Instead of planting them all at once, I should have planted them at intervals – especially the radishes, beets, green beans and greens.

About this time, I found out that water was no longer provided by the farm and I would have to haul in my own. On the next plastic recycling day, I picked through the blue bins on several streets in my neighbourhood, amassing about twenty plastic containers (see Figure 5).

Although the weather remained cool in May and early June, I relished my time at Plot 46. I brought a folding chair and enjoyed taking breaks and sipping tea. I met a couple of neighbours hard at work getting their gardens planted. The air was fresh with the smell of compost and the land coming to life.

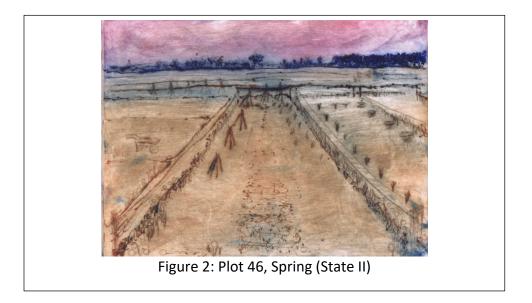


Figure 2 shows state II of my plate with the addition of some details of the garden – my neighbour's wheelbarrow on the left, the tomato cones and the teepees for beans along the sides. It was at this point that I became aware that my print was the reverse of the landscape that I actually saw. *Oh, well. It isn't a photograph,* I thought. In printing this impression, I used colour "plate tone" to enliven the image. I often visited Plot 46 late in the day and got to enjoy many lovely sunsets.

Early Summer

A wet spring turned into a dry but cool start to the summer. The weeds were growing faster than my seedlings and seeds. In addition to the grasses, which I have not yet tried to identify, my plot was overrun with thistles and dandelions. I have maybe 50 feet of unmanaged field to traverse between the road and my plot. I decided to buy a weedwhacker to cut things down. I was able to make a neat path to my plot and to manage the rapidly growing weeds along the plot's 100 feet of borders.

So far I had just planted along the borders of the plot leaving the centre unproductive. I asked my husband to make some two-by four dividers to go in the center of the plot. In one box, I planted the "three sisters" – beans, corn, zucchini. In another I planted zucchinis, and mixed lettuces. In the third I planted a mix of seeds I had been keeping in my Seed Keeper for an indeterminate length of time. Nothing came up in the third box. Lessons learned: seeds do not last for more than a couple of years; do not buy more seeds than are necessary.

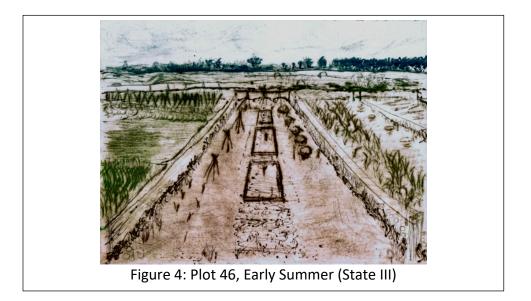
I continued to haul in wheelbarrow loads of compost from a communal pile left by the farmer but it was a long hard push over pretty rugged terrain. I started filling four large plastic storage containers that I loaded into the back of our Jeep Cherokee. Even with an off-road vehicle, getting across the ruts to the plot was still a bit nerve-wracking. I did not want to get stuck.



Figure 3: Corona bean blossoms

Although my plants were taking hold and starting to flower, few seemed to be setting fruit. I wondered if there were sufficient pollinating insects on the barren open land. I brought a fine bristle paint brush and flitted from flower to flower, and sure enough, the cherry tomatoes, corona beans, and zucchini began to set fruit. Next year I want to have some spring flowers growing in my plot to attract insects earlier in the season.

My summer was ridiculously busy with a variety of art initiatives, conferences, and my administrative responsibilities at the Ottawa-Gatineau Printmakers Connective. I started to feel overwhelmed and had to postpone my Plot 46 printmaking, having barely enough time to keep my garden watered and weeded.



In the winter of 2023, I signed up for studio time at the Ottawa School of Art. Pulling out my Plot 46 plate, I carved out time in my week for finishing the series. In state III I have added the box structures in the centre of my garden and scribed some additional changes. In retrospect, I over-wiped the plate so the early summer is less colourful than I would have liked. But at least the series was once again underway.

Mid Summer

By the middle of July my garden was finally starting to produce. At first I had radishes and the odd green bean along with leaves from my ever-producing collard plants. By the end of the month, I was getting a few snow peas, hot peppers, and zucchinis.



The summer weather turned hot and dry. Watering became another guilt trip. Each visit I had about 20 gallons of water to distribute among all the plants. Figure 5 shows the empty bottles that I would string together and drag back to my vehicle. I always gave water to the cherry tomatoes and hot peppers; other plants were watered less frequently. Knowing my plants were

going thirsty, I felt that I was always in a "Sophie's choice" predicament. Lessons learned: Get more plastic containers next year and allocate more time for my research-creation project.

There are animals on the Maple Hill Urban Farm: a resident cow and calf, lots of goats, and an array of chickens, some of which have been rescued from backyard coops. There is also a herd of alpacas. The alpaca walk is a family activity that can be booked. All animals on the farm are free roam and have the benefit of local healthy food (Maple Hill Urban Farm website). I like that the animals on the farm are for viewing and not eating (as far as I can tell).

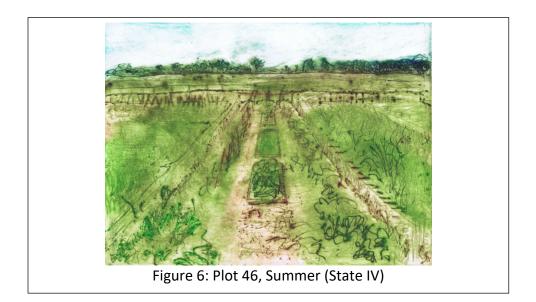
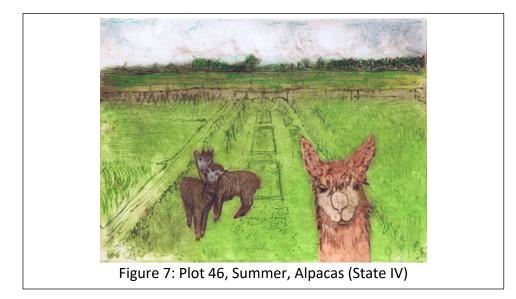


Figure 6 (State IV) is perhaps my favourite print in the series. I like the depth of colour and the vibrancy of the vegetative lines.



Although I avoid romanticizing the lives of farm animals in my work, in Figure 7 I imagine alpacas hanging out at Plot 46. To make this print, I prepared two drypoint Tetra Pac plates incised with alpaca images, cut them out, inked and printed them on top of the plexiglas plate.

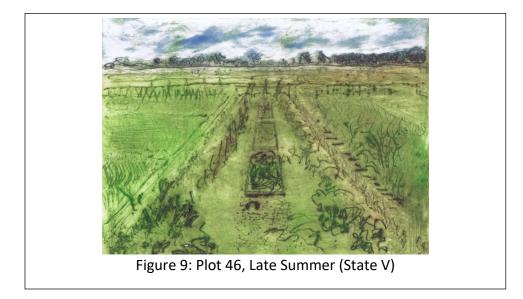
Late Summer

No-till gardening books warn that the first year is not likely to produce high yields and, indeed, I had no bumper crops other than a few giant zucchinis that appeared in time for my weekly visits. I started making an amazing zucchini lasagna. By mid-August I was regularly collecting handfuls of cherry tomatoes, beets, beans, herbs and greens. The peas withered due to the lack of water. I also got some tiny inedible ears of corn. My three sisters experiment was a bust (refer to Early Summer). I probably planted the bed too densely but only the beans were productive.

My radishes did brilliantly early in the season and their flowers were attracting bees, which was a very good thing. Even though I planted more, the shortage of water toughened them and biting into a radish became risky, paramount to chewing on a habanero pepper. By late summer, they were going to seed in huge masses almost blocking the entrance to the garden.



I did a web search and found that radish pods are edible. Radishes (*Raphanus sativus* spp.) are members of the Brassica family and are edible at all stages of their lifecycle (Waddington). After the seeds are sown and young seedlings emerge, the root gradually plumps up into the crisp radish we know and love. Young radish leaves can also be used in salads. If not harvested soon enough the radish will transform into an amazingly bushy plant with a hard root and masses of flowers, which are good for attracting pollinators (see Figure 8). The blossoms soon transform into masses of green pods, which are yummy either raw or fried crispy with a little oil and salt. Left undisturbed the pods will continue to mature. Once the pods are dried, you can harvest the seeds to grow next year or to sprout.



By State V the plate, like the late-summer garden, was getting a bit worn out.

Post-Harvest (Fall)

I left the beans and radishes to dry on the vine and then just cut them off and put them in pillowcases to finish drying at home. By the end of October, I cut down everything and put the plant material on my compost pile alternated with layers of compost and leave litter. Once I had added all the compost I wanted to haul and spread on my beds, I brought bags of leaves from our backyard. These would start to break down under the snow.

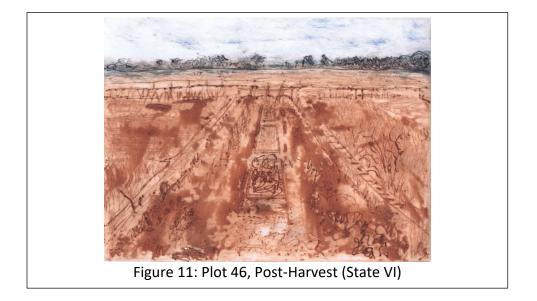


Figure 10a: Dried bean harvest

Figure 10b: Dried radish pods and seeds

Later in the fall, I shucked the beans and continued to let them dry. I was particularly interested in harvesting the corona beans for sowing next year. Figure 10a shows my harvest of dried beans – the large white beans are the coronas, while the other beans were harvested from the various green, yellow and roja beans. Figure 10b are dried radish pods and seeds. Each radish seed is held by a tiny membrane so seeding by hand is very time-consuming. Hopefully I will not have to purchase radish seeds any time in the near future.

As a vegan, growing high quality and tasty protein in my garden is important to me. Legumes, including beans, lentils, and peas, belong to the Fabaceae family. Legumes are a great crop because the seeds are high in protein and the plant fixes nitrogen in the soil. The nitrogen is actually fixed by bacteria that live in the legume roots. Weeds like vetch and clover are also members of this family and also fix nitrogen (Linde, section on legumes).



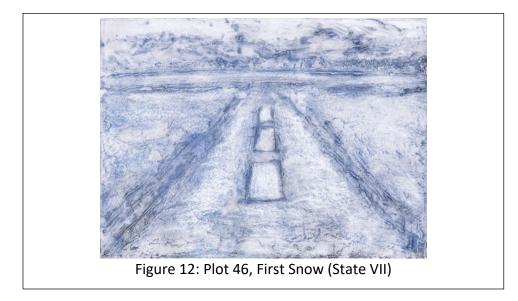
To represent the plot once it had been cleared of vegetation and covered with compost and mulch, I transformed my plate using crackle paste (a type of acrylic gel medium) which I applied to certain areas to cover the plant incisions. The use of sienna brown ink conveys that the growing season is over.

First Snow (Winter)

In December the garden was tucked in for the winter. It was time for me to take a break from gardening and relax. Despite low yields, I feel I had a successful and happy first year on Plot 46. Not surprisingly, I (re-)learned that gardening, even no-till gardening, is hard work. I realize now when no-till advocates say "Leave the shovel in the shed" they really mean "Leave the shovel in the shed except when you are shovelling compost or mulch." When they say "Water well" they do not have to carry water to their garden in plastic jugs. These are more lessons learned.

I thought more about beans and their ability to fix nitrogen. Could I just grow beans next year? Since I find the local choices of bean varieties limited, I could specialize in growing a lot of heirloom beans. Besides meeting my own needs, maybe I could develop a niche market.

Then I came across yet another rule of no-till gardening and sustainable agriculture in general —crop rotation. Bella Linde says that crops need to be rotated in a minimum four-year cycle to accommodate different nutrient requirements and to inhibit the spread of pests and disease (Section on crop rotation). While I want to grow lots of beans, I will have to move them around my plot with a mix of other vegetables from different families. Suddenly my 400 square foot plot seems very small. And I have already ordered way too many heirloom bean varieties!



For my final print in the series, First Snow in Figure 12, I applied a thick layer of matt acrylic gel over much of the plate and let it dry thoroughly. I inked the plate using a bit of black ink in the inscribed lines and over-rolled everything with blue. I then wiped the plate to expose the white of the paper. Just as I felt relief when my gardening was wrapped up at the end of the season, I was glad to be finished with this series of prints. It is time to ruminate on what lies ahead, always hopeful that the soil food web is developing and working its magic under the layers of compost, mulch, and snow.

Reflecting on Plot 46 Year One

"If war has an opposite, gardens might sometimes be it." —Rebecca Solnit, Orwell's Roses

The war metaphor is often used in climate change, agriculture, gardening, and nature in general. Even though I sometimes feel I am mustering an offensive or engaging in day-to-day skirmishes with weeds, weather, and water, I try to remember that we are on the same side. Taking time to learn about different plants, their growing preferences, and their pests and possible diseases is as important to the success of my project as practicing regenerative gardening techniques. Even weeds can teach us a lot about the state of the land if we know how to listen. Learning from the microbes, worms, weeds and my vegetables is what this project is about.

Thinking back to the inception of this project, I first watched *Kiss the Ground* on February 1, 2022. On February 24, Russia invaded and occupied parts of Ukraine. Ukraine is one of the world's great food baskets. It is also a place with a long history of starvation and oppression of the Ukrainian people by Russia and the former USSR. Ukraine has a close relationship with Canada and many Canadians have Ukrainian ancestry. One of my garden neighbours is a Ukrainian woman who has been in Canada over 20 years. She told me that her garden, which is well cared for and productive, reminds her of her homeland.

Syrian and other refugees are also coming to settle in our region. Many Muslim immigrants were farming large areas of the Maple Hill Urban Farm this past year, producing eggplants, garlic, peppers, and pumpkins. They also ran the market at the farm. I am grateful that we can all find our own form of respite and peace here, on the land, growing food together.

About the Media

"The medium is the message" —Marshall McLuhan, in Understanding Media: The Extensions of Man (1964)

I am documenting the Plot 46. Project using video, photography, and journal and research notes. Aiming at an artist book as the tangible outcome, I feel that hand-pulled prints and artists' books go together. The use of the traditional pastoral landscape print in Year One situates my project in a western colonial settler space. From an ecocritical perspective, it acknowledges the current state of agriculture underpinned by Western values of individualism, ownership of property, dependence on technology, capitalist growth, and a belief in "the dominion of man over nature."

A mix of expository and narrative non-fiction will be the thread that unites the research and creative components of the Plot 46 Project. I mused on how these components work together. Language is often used to tell a story. Through a temporal-linguistic process of meaning-making, the reader imagines people, places, things and events as the story unfolds. Unlike the temporally unfolding text, the picture exists as a whole. The eye can move around the picture in any order and it still makes sense. In a painting or fine-art print, layers of meaning are also intertwined in the relationships between the physicality of the object d'art and the subject matter. This unique property of visual art opens a space for imagining new possibilities.

Having achieved a kind of temporo-spatial view of my plot through the use of print states, I will strive to learn more about this place — its history, ecology, the people, and perhaps even its possible futures. While pondering how I might represent the multidimensional complexity, I gaze in wonder at my seedlings in their newspaper pots on my window sill stretching upward toward the strengthening spring sun.

References:

Kiss the Ground. Directed by Joshua Tickell and Rebecca Harrell Tickell, performance by Woody Harrelson et al, Benenson Productions et al, 2020.

Kiss the Ground movie and organization website, https://kisstheground.com/about-us/.

Linde, Bella and Lena Granefelt. No-Dig Gardening: Raised Beds, Layered Gardens, and Other No-Till Techniques. Skyhorse Publishing, 2022.

- Lowenfels, Jeff and Wayne Lewis. *Teaming with Microbes: The Organic Gardener's Guide to the Soil Food Web.* Timber Press, 2010.
- Magdoff, Fred and Harold van Es. *Building Soils for Better Crops*, 4th edition, SARE/ USDA, 2021.
- Maple Hill Urban Farm website, <u>https://maplehillurbanfarm.com</u>.
- National Capital Commission, Agriculture in the National Capital Greenbelt, <u>https://ncc-ccn.gc.ca/places/agriculture-in-the-greenbelt</u>.
- National Capital Commission, NCC's Sustainable Agriculture and Food Strategy, draft, 2017, <u>https://ncc-website-2.s3.amazonaws.com/documents/Sustainable-Agriculture-and-Food-Strategy.pdf</u>.

Secret Seed Cartel, https://secretseedcartel.com/product-category/beans/.

- Shepherd, Beth. "Cattle In Print: The Changing Pastoral." Unpublished manuscript, 2015-2023.
- Shepherd, Beth and Madeleine Rousseau, "Art of the Print," OGPC website, 2022, https://www.ottawagatineauprintmakers.ca/the-art-of-the-print-printmaking-techniques/.

Statista, https://www.statista.com/statistics/271208/urbanization-in-canada/.

- Steinfeld, Henning. Livestock's long shadow: Environmental issues and options. Food and Agriculture Organization of the United Nations, 2006, https://www.fao.org/3/a0701e/a0701e00.htm.
- Waddington, Elizabeth. Radish Pods: 10 Reasons to Let Your Radishes Go to Seed. Rural Sprout, 2022, <u>https://www.ruralsprout.com/radish-pods/</u>.