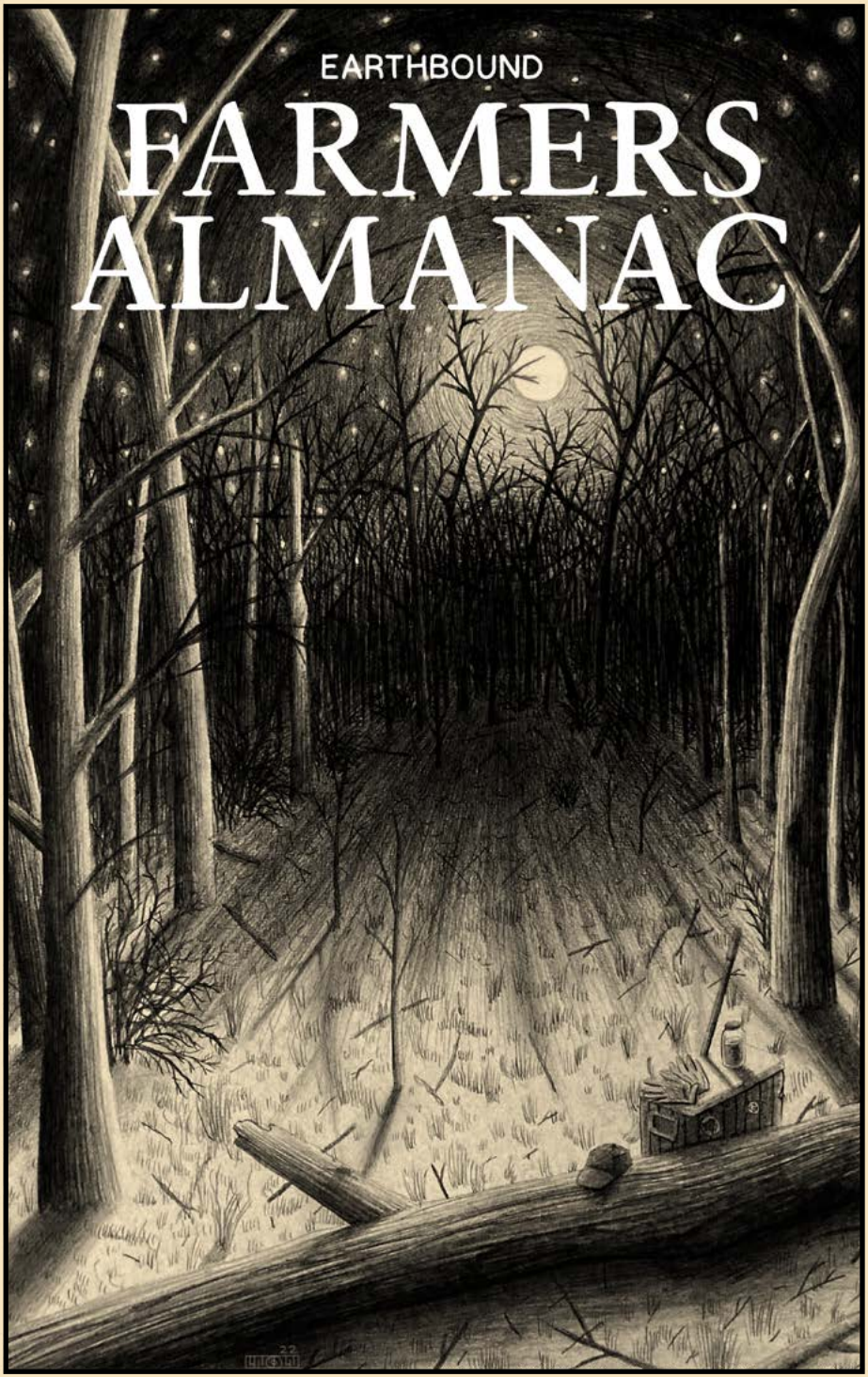


Imagining Life After Levees

Deer Tacos & Tamarillo Tarts

On the Seminole Pumpkin

Plant Guides & Pruning Tips

Earthbound Farmers Almanac

2022

Cover illustration by Lincoln Bostian
Layout and design by sinking city @SinkCityComms

Note from the Editorial Collective

In 2021, the winds rose. In Winter, they descended from the pole carrying sleet and ice that shellacked our fruit trees and ruptured power infrastructure. We felt cautious hope in springtime, planting seeds, collecting rain, innoculating logs and limbs. Then heat domes gave way to Summer breeze blowing wildfires from Cariboo to Coahuila. As the hills, forests and settlements burned, commerce swelled and humanity sowed 10 billion tons of carbon into the atmosphere. Autumn's approach whipped up winds in the Gulf, lifting waters over sinking lands, ripping off neighbors' roofs, and toppling more corporate energy infrastructure. We found our gardens and nurseries ruined, and at moments our resolve scattered with the shingles.

As the year closed the wind rose again, etching finger streaks into the continent which crushed factories and warehouses, and igniting the plains and suburbs with a bitter whisper. It has subverted the power structures of the old world into catastrophe, and blown some of us into new fellowships and alliances. We continue sinking into the feeling that two years into Covid, we're still at the beginning.

Our weather forecast for 2022 says the Earth will be no more hospitable than last year. We will have further cause to consider December as either late Summer or early Spring. The litany of climate anomalies and disasters will grow longer, beyond any one's ability to recount. But of course, the Earth owes us no hospitality or temperateness. What do we owe the Earth?

The 2022 Almanac doesn't try to answer this question, which is already perverted by the language of currency and debt. Our times demand that we break from rigid economic relationship with our home and instead enter into dialogue with it. In dialogue, we can discover, experiment, and propagate what other forms of relationship can exist and have existed. The pieces within demand space for listening and for speaking, whether among humans or between us and the various plants, fungi, animals, microbiota, lands and waters that have been our sources for both sustenance and conflict. We still have a lot to learn about what our roles will be.

Earthbound Farmers Almanac 2022

The Earthbound Farmer's Almanac sources writing from the region surrounding Bulbancha and the wider so-called united states of america. The editorial collective includes but is not limited to participants in the activities of Lobelia Commons. Not all of what is printed here strictly adheres to any one of our individual views of the world nor do we even have a coherent collective political position.

What is included here represents nudges, suggestions and offerings, tethered at times, entangled others, with what we find important in guiding our involvement in the world.

Shmita Year

Lilac

Cycles of time are central to Jewish life. Jewish rituals follow a certain rhythm which defines the significance of time. Just as Shabbat, a prescribed day of rest, occurs on each seventh day of the week, Jewish festivals, like the Jewish New Year and Chanukah, punctuate the year. Less known, but no less central to Jewish cycles of time, is the Shmita year, the "year of release" or sabbatical year. The Jewish lunar calendar year 5782, from September 2021 – September 2022, is a Shmita year.

According to biblical texts, the Shmita year is the seventh year of a seven-year cycle in which the Jewish People would observe "a year of solemn rest" (Rav Cook). In the Torah, God tells Moses the Children of

Illustration by Rae (@foxandfernpress)

Israel will farm the land for six years, and in the seventh year the land and the farmers will rest. Any crops that grow of their own accord and all perennial foods will be made accessible to everyone, no one can own or sell anything. After seven cycles of Shmita, the forty-ninth year will be a Jubilee year where all plots of land will revert to the original owner, therefore no one will be landless. There would be no real landlords or tenants, only people with a fifty year rent agreement. The land itself cannot be owned for in reality it belongs to God.

The Torah illustrates one way to observe Shmita which was easily applied within the agricultural context of the time. People were generally more nomadic and subsisted from the land. Farmers could prepare for the Shmita year by storing food and ensuring the growth of food forests in order to sustain the community throughout the year. Now, in the year 5782, how does one observe Shmita? Translating the tradition of Shmita into a time where not everyone farms and not everyone can afford to take time away from work does pose certain challenges.

The tradition of Shmita offers an opportunity for the observer to do something different for one whole year. The seven year cycle compels us to prepare for whatever the year of release may bring, to set an intention that the seventh year will be different. Shmita is not just about farming and agriculture. It is about our relationship to the land and allowing it to rest, a biblical prescription for environmental sustainability. Shmita is also about social equality, opening up markets and making food and land available to all. It also defines a time for rest and a time for work, allowing for cycles of productivity and respite. Finally, Shmita reinforces the idea that the land cannot be owned. For it was God who gave the land to the Israelites and created the conditions necessary for life.

We are living in a world with COVID-19, climate chaos, political and social instability, and unbridled capitalism. That this year is a Shmita year feels particularly significant as we are being called to do something different. Shmita does not necessarily offer answers to solving these specific problems outright, however the practice does afford some sense of intentionality around our relationship to land and to each other. A relationship that is more equal and reverent. Interpreting Shmita can and should be a personal endeavor, for in order to make change happen, we must start with ourselves.

Beyond the Levee

Anonymous

The inhabitants of so-called New Orleans live as a constant reminder of the stakes of building a civilization at odds with the enormous powers of the Mississippi River, the Gulf of Mexico, the skies, the marsh and the swamp. These powers are both life giving and life taking. Colonists and capitalists frightened of the latter sought to devise a scheme to protect themselves and their industrial interests. A year before the "founding" of New Orleans, they set to the task of constructing levees to keep the river out of their new development. In doing so, the colonists sought to violently establish linear time in a place that had never experienced such nonsense. This mile long wall along the river was a catastrophic failure in the face of a flood of significant magnitude by measure of recent indigenous memory. The year 1718 acts as a point of reference with which to orient progress from. A beginning from which all horizons, no matter how malevolent or benevolent, project from.

As the cycles of the rivers' rising waters and the hurricane furies of the Gulf sought to remind these new permanent residents, the natural world would not be tamed by the dogma of progress. Well known and respected by the lands and waters' original inhabitants, the gift of life here is a reciprocal one. One where giving and taking is mimicked by the form of the water rising up the rivers' banks and the bayous' sloughs. This is a lifeway that acknowledges cycles and difference therein, the lifeway of Bulbancha, that place without borders, colonized time and definition. From where we are today, we could say "that which existed before New Orleans" and many would say still exists here among us.

In contrast, the world being constructed by settlers aimed to deny these cycles and enforce a stasis. With the natural world fully subdued, the colonizer was afforded the comforts necessary to replace reciprocity with transaction. Respect for the gift was put aside by the supremacy of paper money, taking what was needed put aside for extraction and efficiency. As pipelines, oil

derricks and canals popped up all over the land and sea, the river was leveed, the backswamp drained and floodwalls reinforced. The functions of extraction, logistical flow and housing markets were secured by the proclaimed function of protection of the vulnerable population.

In the 300 something years of linear time that has passed since Bulbancha was colonized, an abundance of rich cultures have grown and flourished in spite of settler colonialism and the slave plantation monoculture the region's wealth rests on. What has come to be known as "American culture" comes from the drumming and dancing in Congo square, gumbo cooked in the shanty homes of enslaved families and the African woodworking techniques that built the french quarter. Every year throngs of tourists descend upon this most creole of cities to see that culture, giving veracity to the claim that there is something here to be protected.

We are forced to beg for our protection. As the city sinks in some places over 10 feet below sea level and the swamps and marshes surrounding the city have been pillaged and allowed to wash away, we can seemingly only demand higher walls to protect us from the onslaught brought on by progress. In a unified chorus, New Orleanians of all stripes ask the state and its army corps of engineers to continue to guarantee protection, that promise endowed upon those whom the state considers citizens. But even the most generous progressive forecasts don't include protection for perpetuity. This culture of begging endangers us all but it is not our only option.

Life outside of state protection --and often in spite of it-- has long been a matter of survival. Deep in the swamps and marshes, cultures of maroon resistance and fugitivity flourished in combat with and desertion from the social death of chattel slavery. This legacy lived on by the waters of Lake Borgne in the autonomous village of St. Malo, named in honor of the maroon bandit by Filipino mutineers. Poor New Orleanians lived off (and over) the lake, squatting in the backswamp well before they were evicted for the construction of parks, wealthy housing developments and the very floodwalls put up to supposedly protect them. As concrete was poured over the debris of the

homes of these lakeside fishers, Isleño trappers fired guns upon the closing of the marshland commons by the St Bernard parish government.

As the ravages of modernity grow louder and the tenor of the Mississippi's yearly floods crescendo, there is no levee they can build that will achieve environmental stasis and preserve linear time. While the city's floodwalls keep us somewhat dry sometimes, they obscure what's on the other side. This keeps us feeling safe in ignorance as the water gets higher, and robbed of imagination, unable to dream a way to live in cycles with the water that has created and taken for time eternal.

It is only a matter of time before these walls fall again and linear time washes away. Once more, our survival is dependent upon the water and the bonds born of fugitivity.

In the not so distant future, the river lives.

The floodgate holding the river out of its desired path gave way years ago, causing disastrous flooding along the Atchafalaya River. Decades of alarm bells from engineers and scientists never elicited a policy response to allow the Mississippi River out of its prison in a controlled manner. A riverine estuary ebbed and flowed by Bulbancha. Where land had already been forming at a faster rate than anywhere on Earth, the Atchafalaya delta began to grow by several orders of magnitude. The creative and destructive powers of the River returned in full force. As colonial control slipped, the

lands and waters entered a backloop, sending ecosystems into disarray, causing new ecologies to emerge, towns to unsettle and new cultures to be forged.

Although the changing climate has made rains more intense in the watershed, the river's flood crests no longer reach heights that could only be engineered by miles of walls denying it access to its floodplain.

Over years of levees crumbling and never being rebuilt, some communities along the river began to build further from its potential wrath while others chose to stay close to its bounty, building in manners that could accommodate its waters. While some communities have been slower to relinquish their protection, others saw the benefits of letting the rivers waters to return to the fields and either demolished the levees or built check dams into them to allow the waters through occasionally. Eroded fields that had suffered for decades of intensive farming were replenished by minerals and organic matter that the water brought. A network facilitated by riverine communities was established to communicate river conditions and share resources. Areas that flooded in a given year received support from communities upriver and downriver that remained dry.

The streets of Bulbancha are dense with live oaks, pecan, banana and persimmon. Perennial crops grow along the neutral grounds where elders tell stories of when there was a Port of New Orleans. The population swells in the winter and recedes in the summer, many inhabitants adopting a seasonal migration away from the dangers of hurricane storm surge. Those living in the back swamp travel almost entirely by boat and dwell in houses on stilts. These year round residents live off the waters and gardens, knowing that in reciprocity there is both giving and taking.

"Some tract of hopelessly irreclaimable, grotesque water wilderness."

How (and Why) to Grow Squash in the Gulf South

Jacob

Living as we do in such a climate-vulnerable part of the world, we have an opportunity to be at the forefront of developing new ways of gardening and breeding resistant crops that will be of use to a huge and increasing amount of the world's population. As the water rises, we will need crops that can tolerate flooding and salt intrusion. As the temperatures increase, we will need crops that are disease and pest resistant, since without any killing frosts pests and pathogens will be endemic. With increased and intensified storms each year, we will need crops that can quite literally bounce back from hurricane winds, or else whose growing season skirts the stormiest parts of the year. Importantly, we will need crops with as much genetic diversity as possible, so that they are resilient and adaptable, able to acclimate to particular regions and conditions, and then just as easily change again as the weather changes.

We need to decolonize our gardens, not necessarily in the sense of rejecting all non-indigenous crops out of hand, but by removing the euro-american-centric parameters of what we "ought" to be growing and taking a meaningful look at our actual, local conditions and needs and then planting accordingly. This will mean growing Indigenous American crops like melons and beans, as well as Southeast Asian crops that grow well in the humidity, African crops that tolerate high temperatures, and crops from Central and South America that are in many cases the more tropical cousins of North American varietals with which we may already be familiar.

We will need to experiment and learn different techniques of growing, both new and ancient, but we can start by looking at what vegetables are available and asking ourselves how they can best be matched to our needs.

We turn now to squash.

The entirety of the *Cucurbita* (squash) genus is indigenous to the Americas. Among the many different species within Cucurbita there are four that are commonly grown for food, and with which most of us are passingly familiar at least: *C. pepo, C. maxima, C. mixta,* and *C. moschata*. These are commonly known, respectively, as zucchini, hubbards, cushaw, and butternut. Some are grown as summer squash and eaten while they are young and tender, whereas others are winter squash, which are left on the vine to maturity and develop tough outer shells and can be stored over the winter. Beyond this, to most people squash is just squash.

It should be remembered, however, that these different species are each very much their own distinct plant, which evolved in its own corner under its own distinct conditions. As such, they of course have their own needs and preferred climates. Such a simple fact can be so easy to lose sight of when one has been completely alienated from the food one eats. It is that last species, *M. moschata*, the "butternuts," which is of interest to us now.

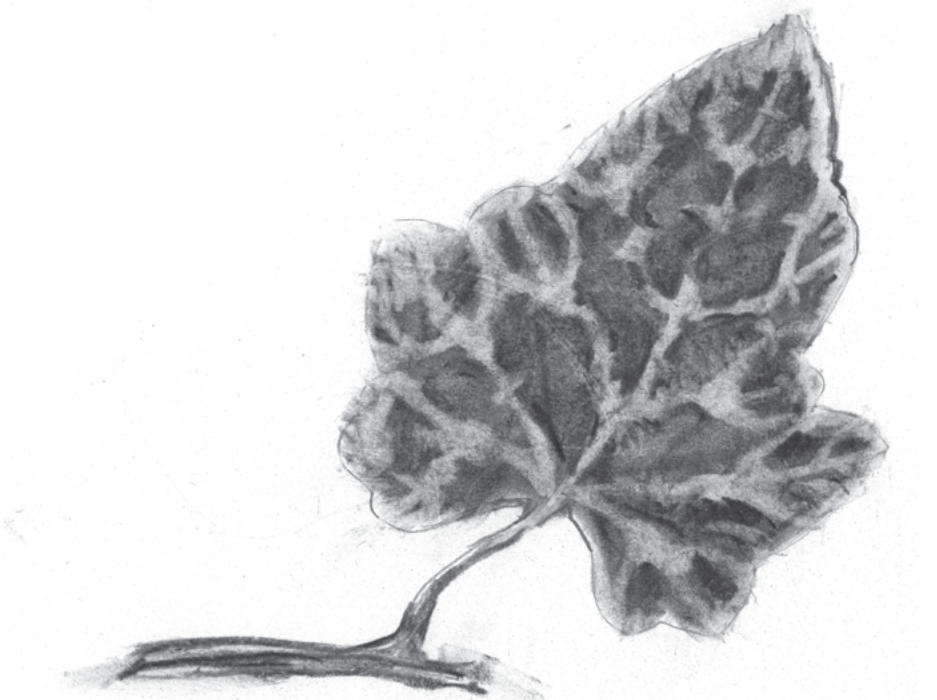
The various squash within this species are generally tolerant of our hot, humid summers, as well as being more resistant to pests such as the (ubiquitous here in New Orleans) vine borer. In addition to the well known butternut squash, the species also contains varieties such as tromboncinos, calabazas, and some (but not all) pumpkins. Again, it is

the last that is of interest to us.

Of the many varieties of *M. moschata*, the Seminole pumpkin is one of the best suited to our local environment. Seminole pumpkins are native to the swamps of Florida, where they were cultivated by Indigenous peoples and trellised over dead trees, from whose limbs the little pumpkins would hang. Although they share a common name with the Seminole people of the area, they in fact have a long history of cultivation and consumption by a number of local tribes, including the Miccosukee, Creek, and Calusa peoples.

The pumpkins themselves are smallish and fleshy, round where they grow on the ground and pear-shaped where they grow hanging from trees or trellises. The flesh is slightly sweeter than that of the better known butternut squashes, but in most regards is much the same.

The vines grow bountifully in our Gulf South environment. Few pests, little disease, and enormous amounts of robust, reaching vines. They are not a plant well-suited to small spaces, but they thrive in neglect, and can be direct-seeded in unused lots or less accessible side yards or as cover for exposed soil.



Illustrations by Ariety

The leaves of their vines are struck through with silvery patterns, a defense mechanism evolved to mimic the marks of deficiencies and illnesses that pests and predators know to avoid. To human eyes, the effect is appealing: a sparkling variegation in a sea of green. Add to this the massive yellow blossoms and orange, green, white, or cream colored fruit, and the effect is quite striking.

Importantly, there is a high degree of genetic diversity among Seminoles, which does some amount of our work for us in our aim of selectively breeding to complement our local climatic conditions. Of course, this is not a project for isolated households to go at on their own. To begin, we will sow our seeds and observe our results, but from there we can share that information, be it in a spreadsheet or by word-of-mouth, and trade the seeds we save from our hardiest plants and meatiest fruits. We can take note of most successful planting dates and conditions, and even start cross pollinating by hand for other desirable traits. Once we have learned something about how and where best to grow the pumpkins, we can cooperate to dedicate the most appropriate yards or vacant lots to pumpkin production, and move on to other crops in other yards by much the same process.

This is not something that will come naturally within the systems of power as they stand. Capital demands the largest profits and the widest margins at all times. If a new relationship is to be forged between ourselves and the food we produce, it will be done in our own communities – outside of capital and state apparatuses.

For now, though, let's begin by looking squarely at what we plant and why, and making alterations where appropriate. Much of the world is going to look much like the low lying swampy region we call home, prone to flooding and hurricane winds, and today is a great day to start thinking about how we will grow.

SEMINOLE PUMPKIN

Your friend in the COVID-19 state of exception

SEMINOLE PUMPKIN: Like much of the worlds culinary heritage the seminole pumpkin (like all squash) hails from the so called americas, its incorporation into the global food system is a byproduct of the vicious colonization and continued occupation of Indigenous lands.

The seminole pumpkin has been shaped to survive the harsh heat and humidity of the american southeast by generations of calusa, creek, miccosukee an other southeastern peoples. the sprawling vines produce wheelbarrow loads of small, thick skinned squash that can be put up for months without going off. This is an annual particularly adapted to the growing conditions of the american southeast but if you live somewhere outside of this region do not despair! as long as you have 3 or so months of frost free weather this pup is well worth growing. The hardy genetics it can likely provide to your squash population as you continue to select for desirable traits (like adaptability to your biome) are worth the effort alone.

PLANT the seeds beneath some sort of sturdy trellis (the Seminoles traditionally grew them up trees) or allow room for the vines to sprawl (they can reach upwards of 25ft in length). Allow 2-3 months before harvest, 6-12 inch fruits can be cut and stored once the colour deepens (leave an inch or so of vine on the pumpkin for improved longevity).

Can be easily roasted like you would a typical winter squash dish but fuck it, experiment. try drying it in strips and grinding into a meal for baking or harvest the young green fruits for pickling and stir frys. The taste and texture are widely considered superior to most commercially available squash. Do not sleep on this cucurbit workhorse.

Alone this plant, carefully selected to thrive in some of the most extreme conditions on this continent can help us survive, but in concert with indigenous land repatriation and stewardship it can help offer a way out of the ecocidal american project and towards a world based on dignity, freedom, and healing.

This plant was grown here long before our time and it seems to me it would be wise to keep tending it.

No one tool alone can liberate us. The only way to weather the coming crisis is to link up, share skills, fight together, refuse recuperation and plant the seeds of a better world.

Solanum betaceum

Tamarillo Curd Mini-Tarts

Yield: 12-15 tarts

Over the last couple years, our late November northern California garden has given a bounty of tamarillos. They hang like dragon eggs for months, purple turning to mottled red and orange. You know they're ripe when the flesh has a bit of give and the fruit snaps off the tree easily. Tamarillos taste like a cross between a passionfruit, a cantaloupe, and a papaya. They're somewhat cold hardy, but probably wouldn't survive a hard frost. They fruit quickly—we had a tree full of fruit within two years of planting.

If you like lemon bars, this recipe is for you. It's also flexible—swap out a graham cracker crust for a shortbread crust if you like, or sub in lemon for orange or grapefruit juice. Use what you have laying around! When cooked, tamarillos deepen in flavor, making for a perfect, zingy balance for a rich, buttery curd. I like to make these mini tarts to hand out to friends and neighbors.

Ingredients

For the crust:

-1 ½ cups graham cracker crust (10 sheets), pulverized in a bag with a rolling pin or blitzed in a food processor
-2 tablespoons granulated sugar
-1 tablespoon brown sugar
-7 tablespoons butter, melted
-1/4 teaspoon salt

For the filling:

- 4 – 5 lbs tamarillos (I used about a medium-sized mixing bowl's worth)
-juice of a lemon (or orange)
-1 ¼ cups granulated sugar
-2 whole eggs
-2 egg yolks
-1/2 cup (1 stick) of unsalted butter
-1 teaspoon vanilla extract

1. Preheat the oven to 350°F. Combine the pulverized graham cracker, sugars, melted butter and salt. Spoon the mixture into muffin tins lined with muffin liners, making sure that roughly the same amount goes into each tin. Tamp the mixture down using your spoon or a quarter-cup measure. Bake for 6 – 7 minutes, or until your graham cracker crust is golden brown and aromatic.

2. To process your tamarillos, cut them lengthwise and scoop out the pulp using a spoon (a grapefruit spoon is great for this if you have one, but I didn't, and it just took a bit more elbow grease). Try and get as much flesh as possible when scooping out. Once you've got your pulp, transfer it to a saucepan and turn the heat up to medium-high. Add your lemon (or orange) juice and sugar and let the mixture simmer uncovered for about 8 – 10 minutes, stirring occasionally. Let the mixture cool. Blend and then strain through a fine-mesh sieve, gently stirring and pressing the mixture through with a spatula. Discard the seeds left behind. (You can make this mixture up to 3 days in advance.)

3. Return the strained mixture to the saucepan and turn the heat to medium-low. Add the egg yolk, eggs, vanilla, and butter and stir everything together. Stir constantly until the mixture thickens (8 to 10 minutes). It should be 170°F on an instant read thermometer. Strain again using your fine mesh sieve into a bowl (ideally with a lip that helps with the pouring. Pour an equal amount of the newly strained mixture into the muffin tin, over the graham cracker crust. I like to pour until I've reached about ¾ of the way up the side. Bake at 350 °F for 8 to 10 minutes—until it jiggles but doesn't slosh.

4. Let the tarts cool for at least an hour, and then transfer to the fridge to chill. You can serve chilled or at room temperature. I do find that chilling them makes for the perfect texture.

Start Your Own Decentralized Nursery

So you've decided to start a decentralized nursery. Sweet!

Decentralized nurseries are something that lots of gardeners do already, starting a few extra plants and giving them to family and friends. Scaling this up a bit, it's easy to grow hundreds of fruit trees, veggies and medicinal herbs in a small area. With the right connections (to find good homes and caretakers for the plants), this kind of specialization is one way to make a big contribution to local food autonomy relative to how much land and labor are involved.

PLANT SELECTION

There are many ways to decide what to grow in your nursery, including just growing tons of one plant you love and wanna share. For the sake of this guide, we'll start by discussing how to narrow the field to what CAN grow in your area, and then we'll go from there.

First we need to understand the climate our plants will live in. Look up your USDA growing zone, which is determined by the lowest average annual temperature - the growing zone only tells you how cold

the coldest night of winter is likely to be (see page 125 to see where you land on this moving target).

You can look up a plant's "hardiness" i.e. range of growing zones that it tolerates, and you can also find crops listed by zone. This is a good place to start, but keep in mind that USDA zone only describes coldest temperatures. You'll also want to know about:

- Record heat, frequency of 80°+, 90°+, and 100°+ days/year
- The length of your growing season: the time between the average last frost before Spring and first frost of Winter.

THE RAIN

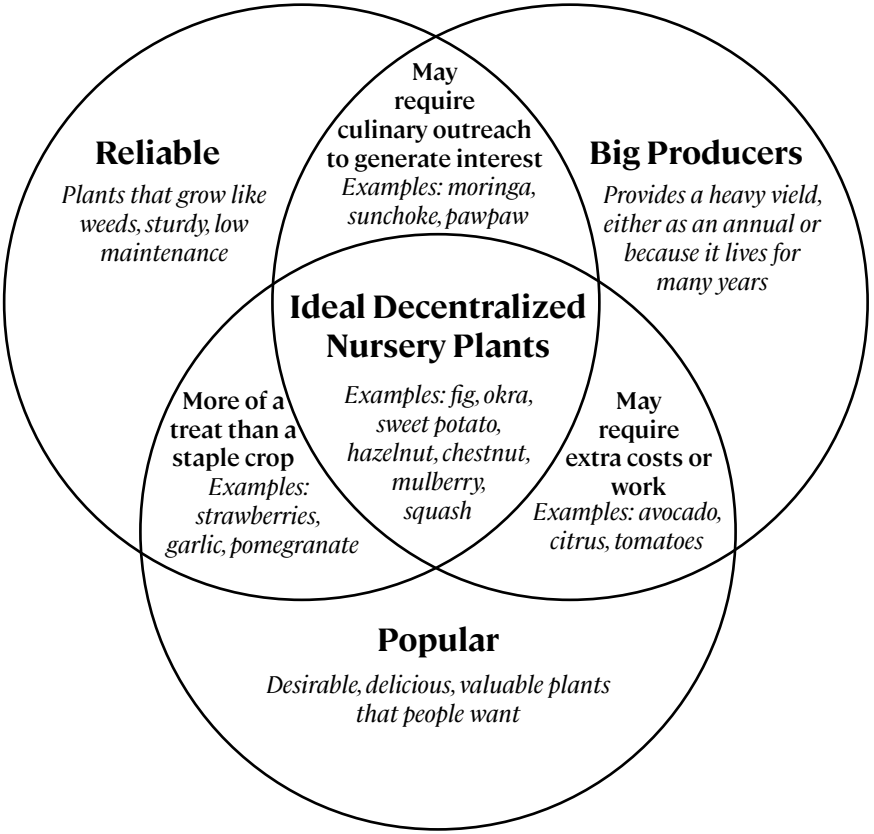
- How much?
- How often?
- How many consecutive days without rain is typical in recent years?

Combining the parameters of rainfall, low and high temperature extremes, we end up with several climactic categories: cold temperate, cool maritime, hot and humid, arid and hot, etc. See page p. 115 for a list of perennial vegetables by climate.

The most direct way to find out what grows best in your area is to learn from people who've been growing there for years (while staying tuned to climactic shifts and the potentials of uncommon crops). If you're new to an area, try asking around at a farmer's market, your local cooperative extension, or start a conversation with an older neighbor.

Plant selection starts by figuring out what we CAN grow, the rest of the process can go in different directions based on personal, cultural, and strategic considerations. In general, we want to grow plants for distribution which are **sturdy, big producers,** and **popular.**

Our preferred decentralized nursery plants here in New Orleans (zone ~9b), in a Hot and Humid (but not yet subtropical) climate, will be somewhat useful to those of you in most of the Southeast US but includes some subtropicals that are only viable in the Southern US in Florida and narrowly along the Gulf Coast, widening into the Rio Grande Valley in the borderlands of so-called Texas.



Our fav #decentralizednursery trees are cheap and easy to propagate, hard to kill and fruit in a year or two - mulberry, fig, moringa, papaya, banana - pictured here are some mulberry cuttings and some banana pups sharing a big long nursery bed underneath some recycled shade material.

The mulberry is really easy to grow in a really wide range of climates, it has edible high-protein leaves and a huge variety of different sizes of shapes and flavors of fruits.

Some of our fav veggies for the decentralizednursery in New Orleans are perennials like sissoo spinach, pigeon pea, and sweet potato, and fast-growing heat-tolerant bug-resistant annuals like okra, basil, melons, okra, peppers, sunflowers, amaranth, beans, and certain squash varieties (pg. 18 for more info)

The most vital input of any nursery is soil, which ain't cheap. These long mound style tree beds are more efficient with soil than typical pots - thousands of cuttings and propagated trees spend a season packed in tight together before being dug up and distributed.

THE GIFTED SEEDLING IS JUST THE START OF THE CONVERSATION

Centuries of an indigenous apocalypse, manufactured food scarcity, flood mismanagement, and now the virus, accelerating the shitshow. It's clear we are on our own, so we gotta take care of each other.

Our task is to construct and re-construct and share the knowledge and the infrastructure necessary to actually do so, to grow good food for example, and to do it in a way that is joyful and connects people to each other and the land. Insofar as living plants can be considered a resource, they are a remarkably shareable one; one plant can become a hundred thousand plants in a few generations, either via clonal propagation (cuttings) or from seeds. *Plants are powerful,* whether we seek to sequester carbon or feed ourselves, and we want to find ways for more people to become acquainted with that power.

DECENTRALIZED NURSERY SUPPLY LIST, from a grower in zone 8

SOIL

Mix: 50% coconut coir, 50% potting soil or raised bed soil

PLANTS

2 varieties of fig tree
2 varieties of sweet potato
2 varieties mulberry tree
Sunchokes
Thornless blackberry plants
Hardy kiwi cuttings
Turkish rocket, bare root
Sea kale, bare root

PLANT CONTAINERS

Treepots (more efficient for small spaces, good for taproots)
Compostable pots (good for distribution)
Seedling trays (for sprouting)
Assorted small to large pots

GROW AREA

Shelving
Grow lights (nonessential but useful for season extension by starting seedlings in Winter)

PROPAGATION TOOLS

Rooting hormone
Grafting knife
Parafilm grafting tape
Pruning shears
Heated seed-starting mat

IRRIGATION

Digital hose timer
Sprinklers & valves, splitters
Hoses

"...in CNY rain came late, it was late spring in mid-summer. Lack of spring rain was tough on new plantings, and heavy mid- and late-season rain was tough on rivers and all their kin. I heard that rivers received less rain because it fell while total evapotranspiration was much higher, whereas normally more rain would've reached rivers before plants were fully pumping it back in the air."

Sat 8:41am

"Also on the river front, scientists use the 'water year' of Oct - Sept to think of river regimes: Oct 1 tends to be the driest and lowest height of year for rivers, a sort of reset/new year point on average. This year drying occurred early summer and oct 1 was very wet

That is apparent on river hydrographs showing discharge over the yr, which can be a helpful visual

Made for a great fall mushroom season tho"

Sat 8:47am

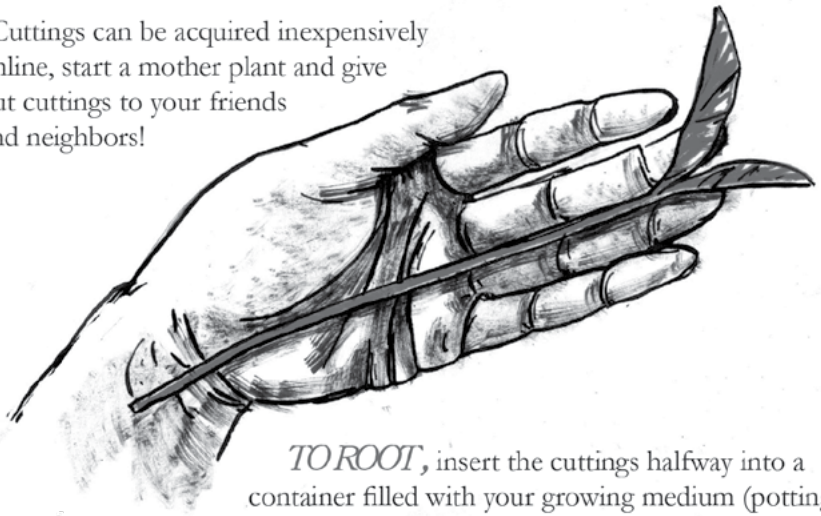
LONGEVITY SPINACH

Your friend in the COVID-19 state of exception

LONGEVITY SPINACH: This little pup packs a serious nutrient punch. Used throughout the world as an easy to grow green and medicine for a host of ailments. Hence the name.

Longevity Spinach is quickly propagated through cuttings and can be grown as a perennial where winters are milder (zones 9-11). Good choice for a partial sun spot, just be sure not to let it dry out!

*Cuttings can be acquired inexpensively online, start a mother plant and give out cuttings to your friends and neighbors!



TO ROOT, insert the cuttings halfway into a container filled with your growing medium (potting soil, sphagnum moss) and keep moist but not soggy and out of direct sun. a clear plastic bag can help seal in humidity.

Longevity spinach can be eaten raw or cooked as a potherb. The young leaves in particular have a mild agreeable taste

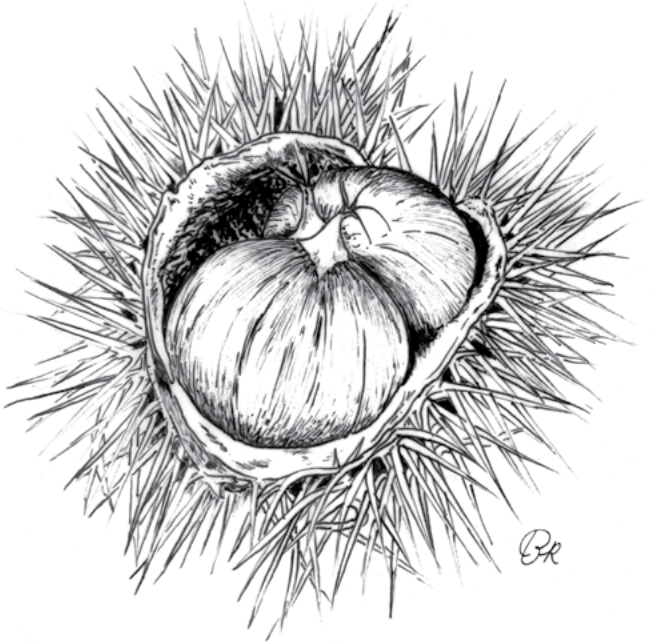
FRESH FRUIT AND VEGETABLES will likely be some of the first goods to see price hikes and possible shortages due to their labor intensive cultivation and dependence on complex and speedy logisitics systems. Even before the current crisis access to these foods was already uneven, split along racial and class lines. These foods are also critical to maintaining a healthy immune system. It's important to get these vitamin and nutrient rich plants planted ASAP to shore up our communities' food security, boost immunity and ultimately secure our autonomy.

The better we eat, the better we can fight back.

No one tool alone can liberate us. The only way to weather the coming crisis is to link up, share skills, fight together, refuse recuperation and plant the seeds of a better world.

One Million Chestnuts: A Proposal

BuildSoil
wiki.BuildSoil.net



The Million Chestnut Project is an effort to plant accessible, perennial, easily-harvested food crops (mostly chestnuts) in cities and neighborhoods, in order to build community capacity, combat food scarcity, and compensate for anticipated disruptions in mainstream agriculture. The work is done by community members, who form autonomous, collaborative groups, then work together to acquire nuts, plant them, tend the trees which grow, harvest nuts, and share food with their communities.

This project is for everyone, not just experienced gardeners.

There are lots of ways to get involved.

You might be interested in the actual gardening
You might have land available for planting
You might have experience facilitating groups
You might have connections to local organizations, churches, or schools
You might be excellent at community outreach or volunteer coordination
You might have writing or research skills to contribute
You might like to cook for your group's planting parties
You might be interested in harvesting chestnuts
You might be interested in processing or milling nuts into flour
You might want to help us maintain this Wiki or our other online tools
And so on!

Time commitments will vary, and that's great: we want people to participate as much as they'd like, in the ways they choose.

The Million Chestnut Project is organized via our forum (forum.buildsoil.net), which provides a collaborative organizing space.

Why Chestnuts?

We're often asked why we've chosen to place focus specifically on chestnuts.

For much of the northern hemisphere, beech-family ecosystems are an important carbon sequestration landscape. They share a niche that provides food and habitat for many organisms, and many are compatible with regenerative human food systems. Oaks and beeches are not consistent producers, and they require some processing. Chestnuts, however, produce nuts annually and often for centuries. Chestnuts have been integral to food systems all over the Northern Hemisphere, including in Italy, Spain, Corsica, Korea, China, and the Eastern forests of North America.

Chestnuts are perennial. If you plant corn or wheat, you have to do it again next year. If you plant chestnuts, you can produce food for the next 5000 years.

Chestnuts are nutritious, more like a grain than a nut. They can be eaten roasted or dried and milled into flour for bread, pasta, and desserts.

One chestnut tree can provide around half the grain needs of an adult human. This means that chestnuts trees can help replace soil-damaging and tillage-intensive annual grain agriculture, which is currently contributing to erosion, soil death, carbon loss, nitrates in groundwater, and dead zones in oceans.

Chestnut population can be quickly increased, because they start producing nuts in 2-5 years.

They produce a staple crop with room underneath. Mature chestnut trees can produce the same amount of food as a cornfield, but unlike corn, they produce in a canopy. There is room underneath them to grow other crops, foster native plant restoration, or to walk on streets and sidewalks. Because of this quality, chestnuts have the potential to bring staple food production into urban and residential spaces. This would allow us to shift the large landscape back to wild systems, grasslands, and return land to Indigenous people.

Chestnuts are useful as coppice trees, so they can produce construction material, poles, fuel, etc. This also means we can plant a lot and cut most of them back after a few years, and the trees will get bigger.

Chestnuts can feed activists and community groups, directly producing a little bit of regenerative freedom and feeding other kinds of climate action and organizing.

Chestnuts have traditionally been accomplished through group action, cooperatives, collectives, festivals, feasts, celebrations, and community. While chestnut trees can be planted and maintained by individuals, they also provide incentives for collaboration to improve the efficiency of growing, harvest, and processing. The planting of urban chestnuts has the potential to springboard cooperatives, businesses, clubs, and other sustainable agriculture projects.

Chestnut Planting Guide

Supplies

Chestnuts: A lot of nurseries sell nuts by units of 25-30 nuts for $6-$9.

Soil: You need about 6 cubic feet (30-40 gallons) of soil to put on top of the ground.

You may need additional supplies for squirrel protection (see below).

Steps

1) Plant nuts in loose raised beds so that they can be dug out easily in the future.

Loosen the soil, add like 6 inches of compost/soil (making sure it's pretty well drained) and plant the nuts 8+ inches apart.

If the nuts have sprouted already, it's really important to place them correctly. The root should go down and not bend against its will. If there is still a nut, it should be within the top inch. The edge between the root and shoot is a clear change in texture and should be at the surface.

There is the issue of protecting these from squirrels. You could try making a little protective frame of PVC pipe or bamboo and covering it with shade cloth, chicken wire, or plastic to keep squirrels out.

Mulch with straw or wood chips around them after a deep watering.

Sometime mid-summer it wouldn't hurt to take a flat shovel and do a simple cut between the trees to prune the roots so that they're not getting tangled.

2) Let them grow like that for a year, then dig them up in late winter and transplant them. If you plant them a little further apart, they can stay 2-3 years.

The best time to dig them up would be when they are dormant in the

winter. They would probably be OK with spring digging, but if you dig them up while they're still dormant, they'll tolerate being wrapped in plastic with wet cardboard and moved.

If you decide to leave the trees in the nursery for 2-3 years, space them more like a foot or two apart and make sure to do root pruning.

3) Ultimately they can be transplanted and will eventually produce nuts as long as they have a pollinator friend close by.

In 20 years when they're grown up, the trees will need to be between 25 and 60 feet apart. Closer is better. When it's a long stretch like along a street, they can be more like 12 feet, but they need that other space to the sides to grow.

Alternatively, here's our recommendation. In 3-4 years trees will start flowering. If they are really close to one another, they have a chance at producing nuts, and you never know whether trees will survive or not. So you might consider planting them 5 feet apart, as long as some trees are in the final location that you want for them. The idea would be to plant every 5 feet, harvest nuts early, and plan to thin and cut back many of them in 15 years. That also helps with the project of getting woody biomass, coppice, mushroom logs, firewood, useful poles, etc.

We learned a lot from watching Akiva Silver at Twisted Tree Farm -- we recommend checking out his videos.

For a list of Chestnut varieties and their pollination types, check page 112.

"Hey Im catching up on several hundred messages... and wanted to send you a submission of weather weirding, regarding my peppers - last year (2020), they didnt even start until mid summer, this year (2021), they fruited in May, and flowered again in September, produced a second round in Oct / Nov. I think its due to the extra heat and rain. ATL. Same porch, same containers, same place. But also feels like midsummer we are low water. The tomatoes and peppers midsummer had extra thick skin."

"Ya I got a ton of (blue italian) oyster mushrooms in November. They'd pop out and freeze and die. I think it has alot to do w the logs only being a year old but it seems off. They're all being tricked by weather fluctuations. Here in semi coastal Maine we had spring like weather up until December and it was snowing in other parts of Maine and Massachusetts"

The Importance of Traditional Apprenticeship

Anonymous

I'm not talking about apprenticeship as defined in the dictionary. I'm talking about Indigenous teacher-student relationships. I'm talking about the way our people passed down information. I'm talking about one of the keystones that supported generations of Indigenous prosperity in these lands. It's hard to name, hard to explain, because colonization has nearly destroyed this aspect of traditional life. For lack of a better English word, I will call this apprenticeship.

Few, these days, are fortunate enough to have a relationship like this with an elder. I have been fortunate to experience this kind of apprenticeship and spend years and years living with my teachers, learning hide tanning and other traditions of the Northwest and Midwest. My teachers taught me how to hold this heritage until I'm able to pass it on. A tanner will always want to communicate as

> *The unrightful implementation of land ow*
> *traditional apprenticeship system as well as*

thoroughly as possible everything it takes to tan an animal's hide to make it fit to clothe or shelter our people. To be the first thing a baby feels when birthed. To keep the cold out of a dwelling during sub-zero temperatures. The refined focus of our people's passions pouring into the next generation's cup.

In many Indigenous cultures before colonization, there was never a question whether apprenticeship was in place or not. It was as common as breathing. It wasn't an expectation. It wasn't something elders were trying to persuade the young to do. The young looked forward to it with a sense of pride, honored by the chance to participate in immortality.

This is how our ancestors ensured harmonious survival for thousands of years in these lands: From agriculture to communication with those who have crossed over, and all things in between, this is how knowledge, how culture, was stored and passed on. The colonizers, however, never learned the connection between apprenticeship and enduring life. This is the system from which I believe the European myth of the Fountain of Youth was fabricated. The western world was chasing something that was in front of them all their lives.

The time that is available for such things is, of course, not what it used to be. It's such a rare thing these days to be able to live day in, day out with your mentor, to properly absorb everything in its entirety. This society is not structured to accommodate it. And so, because of this and many other obstacles, we lose vital information with the passing of every generation. Many elders speculate that maybe too much has already been lost. Elders themselves have questions that just can't be answered. Our people rely on prayer for many things and this now has to include the revitalization of our culture.

The unrightful implementation of land ownership and borders has helped destroy this traditional apprenticeship system as well as every other system our people had in place. These policies make traditional living on these lands nearly impossible. Nomadism is another system

nership and borders has helped destroy this
every other system our people had in place.

that is failing due to the land ownership concept, which proves that the very foundation of western culture is domination and control of nature. This is not sustainable. It is doomed to fail, as is every other form of dominating culture on this planet.

The suppression of common dignity toward women and children in a male dominant society created the situation of forced participation in apprenticeship. It became a chore that had to later be reinforced with the promise of wealth and financial security and power. But inheritance should never require coercion. Reviving the importance of original instruction, making a difference in the world as a whole, and providing for future generations is a vital part in holding lineage. Making sure it gets passed down as intact as possible, without taking away from it, and adding only what is essential for the next generation's prosperity.

The lack of humility and empathy in male leadership has twisted what the world thinks a man should be. The problem with patriarchal society is the unwillingness to relinquish what is valued most: control and comfort. We see this in every aspect of western society. Genocide is never a necessity. It's a choice made by those whose comforts and power may be threatened or diminished.

This conditioning has to be unlearned, and traditional apprenticeship is one way we can unlearn it. Traditional apprenticeship is a means of handing down truth that can't be handed down in any other way, which is why this manner of teaching is so important. It's not a course you decide to take at school. It's not a degree you put on your wall. It isn't something you do in anticipation of reward or benefit. Quite the opposite. It will always require you to sacrifice your comfort. It will always require you to relinquish control. This is maybe its most valuable lesson and the only way the young will correctly pick up and hand down what is truly important.

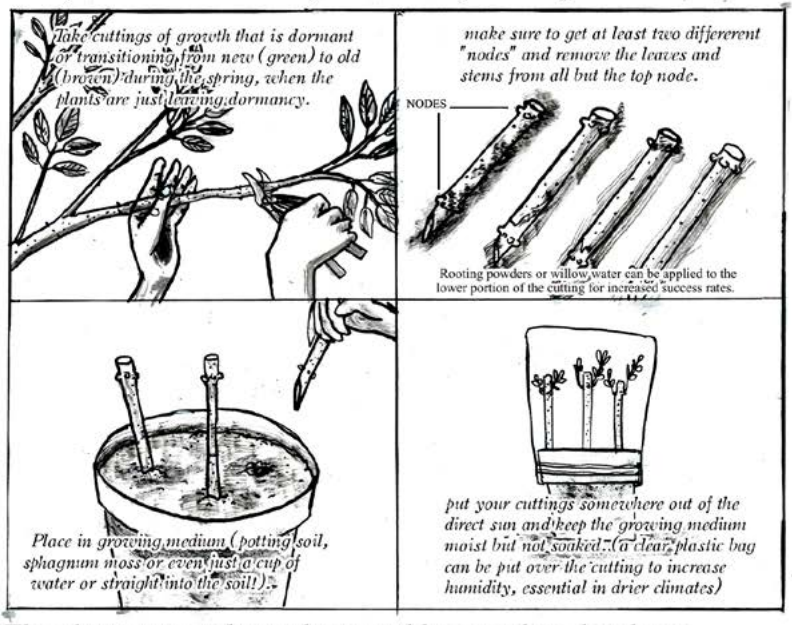
"On the Olympia Peninsula this summer, trees and understory plants suffered severe drought and damage. In particular, Western red cedars and Alaska yellow cedars were badly scorched. Vegetation bordering roads suffered the worst of the damage, but even trees in the coastal rainforests were severely affected. Seedlings and young saplings fared worse than mature trees, with many dying outright. While most trees survived this summer, they will all be more susceptible to drought, heat damage, and disease moving forward. While large trees may have sufficient enough root systems to survive multiple years of drought, younger seedlings will not, making reforestation of clearcuts and disturbed areas even more difficult as climate extremes intensify."

ELDERBERRY!

Your friend in the COVID-19 state of exception

ELDERBERRY has a long history of traditional medicinal use and has shown increasing promise in clinical studies reducing the duration of the flu and the intensity of symptoms .This has led companies to cash in on the hype selling expensive elderberry concoctions. but dont worry we can grow it and process it ourselves! Elderberry is not a cure-all but it can be an important tool in the struggle to claw our health back from theose who profit off of our suffering atleast until we take over the hospitals and destitute the healthcare system. :)

HOW TO PROPAGATE: Elder is best propagated through cuttings. Elder is a common and vigorous plant. Look for one nearby either from friends, in the wild, or cheap online.



The plants are ready to plant outside once they develop a healthy root system. To check, try gently pushing the cutting after a month or so. If it offers resistance you have roots.

Elderberries are harvested once they reach a rich dark purple color. the leaves and stems can be unhealthy if consumed in quantity so try putting the whole cluster on a pan in the freezer for an hour for easy berry removal. This is a berry best used after processing, so try making your own elderberry syrup or wine!

No one tool alone can liberate us, the only way to weather the coming crises is to link up, share skills, fight together, refuse recuperation and plant the seeds of a better way.

"I had forsythia blooming in November, in Maine. They are usually the first flower to bloom in spring"

"Here in Atlanta we had a hail storm in late April that destroyed the new buds on most of the fruit trees so that we didn't get loquats, mulberries, apples, or pears on trees that usually fruit heavily."

"In New Orleans- the loquats in early spring had no flavor and were totally watery. Also, there were no seeds in the fruit, I suspect because of the really cold spell in mid February. The fruit can still develop when this happens but with no seed in it."

Sat 11:28am

"Not even the dead will be safe from the enemy, if he is victorious."
-Walter Benjamin

Rot the Domain

Anonymous

The ghost of dominion actualizes itself in all current forms of our being.

This ghost (history/hierarchical-extraction) accelerates it's consumption of our freedom in our daily life. It feeds itself and forms an empty world. Dismembering rhythms of relationships, ritual, and reckoning. This remains clear in all forms of domination through state violence and extractive industry. But one particular form which is less examined, bearing the mass and responsibility of culture-making, its death-ritual. How we care for our dead and maintain our understanding of the maelstrom of time, allows us to attune to a living world and the relationships which give us meaning. Attunement to the dead reveals we are held in great mystery by our ancestors and that we belong and are free in the world. But we live in a world of ghosts, the incoherent border between us and our ancestors.

The funeral industrial complex has long capitalized how most people in colonized places interact with deaths and dying. The ability to maintain deeper cultural expression of death rites continues to deteriorate as the industry grows. Cultural practices of funerals and disposition, removed from white-christianized power, are met with ever higher annual costs, less agency of the bereaved, and destruction of ecosystems (in tandem with all industry).

The solutions should not be "better" or more compassionate business models, more types of products to buy to adorn the dead and dying, or more specialists. Reform of the industry will only strengthen it into new forms of expropriation and dominion over our bodies. We should reject its form altogether. Simply, we shouldn't have to pay (and often become indebted) to care for our dead. Funerals shouldn't be a business, burial shouldn't cost (see stolen land), birds should be free to eat us with consent, and grief is anathema to work.

Things to do to resist the ghosts:

Provide accessible spaces and care for the dying that aren't removed from the community, I.e. in familiar homes or communal places.

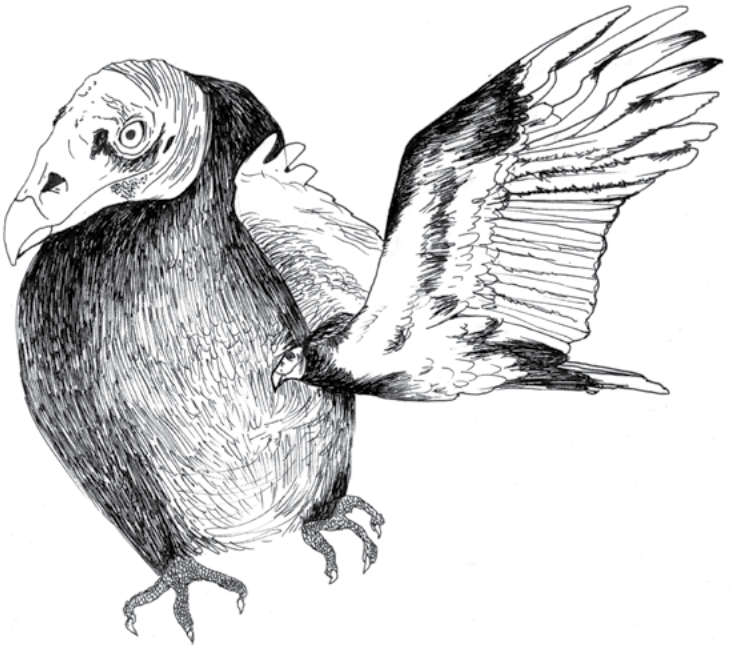
Learn the practice of home funerals and wakes, including the rejection of white supremacy's erasure of your own ancestral death practices.

Find land to practice free burial (or other forms of disposition). Burial on "private" non-municipal land is usually legal.

Keep the knowledge of stolen indigenous land and the colonial genocidal strategy of destruction of burial grounds and dismemberment from ancestral land.

Keep the knowledge of Black resistance to genocide that was and is cultivated through death ritual and burial grounds.

Practice being of a place and supporting its metabolic mystery by helping carrion-eating. Honor roadkill, maintain multi-species charnel zones, encourage nutrient dispersal, and destroy the haunting forces of extraction.



Pruning apples, pears, and plums -- some pointers.

Anonymous

Pruning is a lifelong learning. There's great books, workshops, and (yes) YouTube videos. But I think the most important learning is from each tree.

When I began pruning a dozen years ago, the trees were overgrown, lopsided, and twisted nearly to the ground. I spent hours agonizing over where to make a big cut sometimes. Over time, I realized I wasn't only "thinking" with my head, going over the many (and sometimes contradictory) rules of thumb that I'd learned. I was listening. Listening to what the tree was trying to say. I'd approach, get ready to cut, then pause. Eventually, I learned to speak to the tree, too. I'd say: "Hello! You are a strong and courageous tree, and have grown so well towards the light. Thank you for all your gifts – food and soil and shade. But I see you're a bit heavy and thick in some places. It seems your branches might break. You might get sick. Am I right? Would it help for me to make a clean cut right here?" And I'd feel into it.

I'm a lot quicker now. I have a much quicker sense of things. But I still pause, touch the tree, and speak to it. And listen.

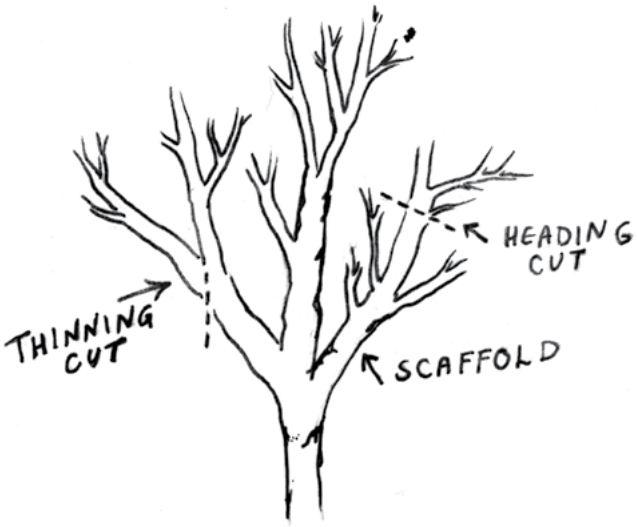
Pruning tips:

Apple and pear trees require pruning in order to fruit well, and to avoid branch breakage and disease. Plum trees will fruit well regardless, but will tend to break branches and get mold without pruning.

Starting a tree:

Remember that "heading cuts" (partway along a young branch) will stimulate side growth. "Thinning cuts" (all the way to a bigger branch) are important to keep the tree for getting too thick.

Use "heading cuts" when starting a tree to generate the structure you want.



Many models exist for young trees. Pick a shape, and cut what doesn't fit.

Also, train young branches in the direction you want. Use clothespins, spreaders (wood with snipped nails in it), or tie-downs.

Think ahead and have a plan for the first several years.

Don't let trees fruit too early or they will be stunted!

Dwarf trees fruit earlier than semi-dwarf or standard.

Mature trees:

Dormant (winter) pruning is for big cuts, to encourage fruiting, and to change the structure of the tree. Branches will regrow with renewed vigor because the energy is in the roots.

Summer pruning (after flower before harvest) reduces vigor because the energy is in the wood. Very important to reduce the amount you need to prune, and to contain size.

Dormant pruning:

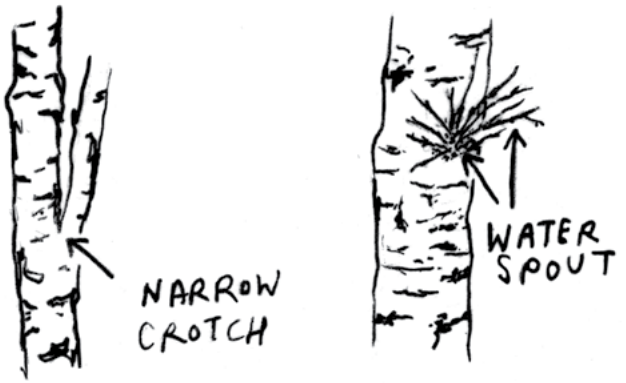
First, take out any broken, diseased, or rubbing branches.

Next, focus on structure – be clear on your shape (central leader or vase or two common ones), and remove what doesn't fit.

Ensure you have 2-4 good strong branches for each "layer" of your tree.

Avoid "narrow crotches" (angles less than 30-40 degrees) because they easily break. Best is 60 deg.

Avoid "water spouts" that aim straight up.



Aim for a "scaffold" of strong branches that can hold good weight (not too horizontal) and have separation for air and light. Fruiting branches will come off of these.

Finally, encourage fruit (apples and pears).

Most "spur-bearing" apple trees produce most flowers on 2nd-year wood. Learn to recognize how old each section of wood is, and to distinguish bigger, slightly furry fruit buds from others.

For these, it's best to try and have a balance of 1st, 2nd, and 3rd year wood. So in a mature tree, remove about a third of the older wood in

order to have these regrow next year as 1st year.

Cut 1st years that are pencil thick to about 3-6 buds long. Next year these will have fruit buds.

"Tip-bearers" mostly fruit on first-year wood, and you must leave a lot of it!

Restoring an untended tree:

Tend to grow really tall, then flop over.

Will have lots of growth up high, lower branches die/wither.

Need to return to pyramid shape so you can access fruit!

Bring down over several years.

Make thinning cuts, not heading cuts (unless you have to and will cut to a thinning cut in a future year).

Focus on the structure you want to keep, and slowly remove everything else, making a few big cuts rather than lots of small ones.

Make sure your cuts don't damage the "collar" of the branch, don't leave a stub, don't tear the bark, and angle down to shed water. Cut the weight off first, away from the final cut, then finish.

Don't cut more than 1/3 the tree in a single winter!

Trxfkintu

Fighting ecological collapse and colonial violence through Mapuche rituals of exchange

Petu Mongelein Janekew
Translation by Nikola Garcia

Translator's introduction: For over 500 years, the Chilean state has waged war against the Mapuche Indigenous communities, forcing them onto increasingly small *reducciones* (reservations) in Southern Chile while selling their land to large-scale landholders, with several of the richest Chilean families included among them. In recent decades, Mapuche communities have adopted direct action to regain their ancestral territories and defend their access to resources through land occupations. In response, the Chilean government has turned to militarized policing to surveil Mapuche communities and defend large-scale landholders. In recent decades, Chilean large-scale landowners have entered the lucrative forestry plantation industry, causing large-scale ecological devastation within the Mapuche territories. Now facing prolonged droughts and fire seasons, Mapuche communities continue to turn towards traditional knowledge and practices to ensure their communities' resilience while fighting the Chilean state and extractivist industries. The collective *Petu Mongelein*

Janekew, formed by a network of Mapuche women living in the city of Temuco and the surrounding rural Mapuche communities, has begun to fight for Mapuche food sovereignty through organizing traditional Mapuche exchange events (*Trxfkintu*). The *Trxfkintu* represents a collective instance where the potential of knowledge and traditional wisdom is put into action. The original *Mapudungun* (Mapuche

language) terms have been kept in the text and a glossary has been included at the end.

Trxfkin or *trxfkintu* (exchange or action of exchanging) is an ancient political-cultural economic practice that still prevails both in the *lof* and reservations, and today is also carried out in the city where different *lamien* can gather from the rural territories. Its main role is food and economic sovereignty, as seed varieties can be exchanged, each with different origins and forms of cultivation. There is also the exchange of crafts such as weaving, clay, natural medicine, food, plants, etc.

The collective Janekew is a network of women from different territories of *wallmapu* with anticolonial principles and a commitment to anti-extractivist, anti-patriarchal, and anti-neoliberal practices. This network has been growing for over a year, but we decided to publicize the collective October 12th, 2021 (Indigenous Peoples Day), starting with a public statement on our Instagram page. We saw it necessary to develop an organizational model against this patriarchal, neoliberal system through forming our collective since there is currently no Mapuche organization that has fought against gender violence in the

Mapuche context, either in *lofs, reducciones,* or within organizations related to the Mapuche struggle.

In discussions about what activities we could carry out post-pandemic, one of our collective's founders had the idea to organize street fairs and exchanges. Together with the *lamien* of *zomo xapetuwe* (a Mapuche organization against gendered violence) we decided to begin calling for public, autonomous street markets and exchange events in different plazas in the city of Temuco. At each event, we all come together with our different products and craftwork, and at the same time hold workshops, discussions, sales and *trxfkin* between the sisters who attend.

The *lof* reservations are in struggle against this neoliberal state, which defends the forestry companies through militarized means they call a "state of siege." These struggles are occurring where *pu lamien* (sisters and brothers) are without the land and water they need to exercise *mapunche mogen* (Mapuche living). This is a historical conflict over 500 years old and currently we are seeing the effects of historical usurpation by the Chilean state. People have no place to plant, no place to build their houses, no place to keep their animals. In several territories there is no water, no *lawen* (medicinal plants). The *trxfkin* is a form of survival today and a form of resistance for economic, political and cultural sovereignty. It presents an alternative to what the neoliberal system imposes on us through money, the Chilean peso and the devaluation of alternative forms of exchange related to our culture like the *trxfkin*.

The right to freedom is a common good as well as the right to water, air, and free territories. For all beings who embrace life and well-being, creating anti-neoliberal contexts to exchange knowledge, crafts, skills, and food is a very good way to decolonize our spaces and networks.

What follows is their public statement announcing the formation of their collective:

Petu mogeleiñ Janekew “In these dates of pain we bring a message from us *pu lamien* for our Mapuche peoples”.

To our *wallmapu* and our *lamien* of all territories:

In these dates of pain we bring a message from us *pu lamien* for our Mapuche nation people, against the Chilean state and all the colonialist states of *Abya Yala* that after 200 years continue to exercise an occupation over our lands, plundering and mistreating our bodies and territories.

KIÑE (1): Our cries are loud and clear. We are organized, regrouping our *pu zomo newen* (feminine energy) against the extractivist violence of the states and the business community: Matte, Angelini, Luksic, Saieh, Piñera, Yarur (the richest families in Chile, including the former president of Chile). We know who they are and we are not afraid! We seek the decolonization and total de-occupation of our spaces and territories by the invading *Winka* (Chilean) state.

EPU (2): We call for the total liberation of our *wallmapu*. To recovery through *kuifi kimun, kuifi rakizuam* (old knowledge and wisdom), to full and just duality, we fight for a reliable interpretation and application of the *az mogen* (ethics of living). Our message to *pu wentru pu lamgen* (friends, brothers, and sisters) is to be *kumeche* (good people), *norgche* (ethical people), *reche* (authentic) both in our *ruka* (homes) and in public. We are here for the active defense of our *itrofill mogen*, the recovery of our *nguillatuwe ka nguillatun* (communal spaces and ceremonies), the active and dignified participation and the uprising of our *pu machi, pu ñgenpin, lawenñgelu ngulamtuchefe,* (spiritual leaders, wise teachers, traditional healers, land spirits), among other LEGITIMATE former positions that continue to rise and we will accompany them in all our territories. We are in solidarity with the recuperations of territory in the *warria* (city) as well as in the *wallmapu* (Mapuche territories).

KÜLA (3) : As *pu zomo* (women) for territorial autonomy we do not want our dignified historical struggle as a people to be used for electoral campaigns, reformist and unrepresentative of the autonomous work and struggle that is carried out in the *wallmapu*. We do not want more “Mapuche” referents with *wingka* ideals and we do not trust, nor endorse, any reformist state process. We are attentive to the cultural appropriation of our *rakizuam ka feyentun*

(knowledge and belief).

MELI (4): As *pu zomo*, we will confront, in every way necessary, the colonial-patriarchal violence exercised by the Chilean state and also by Mapuche and Chilean men within our *lof* (clans), organizations, spaces of struggle, etc. We will not accept any more colonization practices such as rape, abuse, harassment, state violence and extractivism in our territories, bodies and those of our *pichikeche* (young children). We will not accept abusive leaders and authorities, whoever they may be!

KECHU (5): This is a DECLARATION OF WAR to the patriarchy and the state of Chile, but also to people who claim to be our *"wentru lamien"* and exercise physical, economic, psychological and sexual violence against children and women. Those who abandon and do not recognize *pichikeche*, abandoning them to be raised by both Mapuche and non-Mapuche *lamien*. We repudiate those who abuse alcohol and drugs within our *lof*. We must recognize the serious consequences and all the associated problems that bad consumption generates. We cannot preach like the politicians of the hegemonic power about freedom and non-violence if they exercise this power with our *zomo lamien ka zomo wenuy* (sisters and friends).

KAYU (6): To our leaders, spokespersons, public persons and "*weychafes*" (warriors) questioned in the internal organizations of the autonomous *wallmapu* movement, we speak to you and we call upon you to question your practices — affective relationships — daily politics, to reflect, talk and demand that within your organizations there is no room for *lamien* who mistreat, abuse, lie and look down on our *zomo lamien* through hierarchical and abusive actions, both with *wentru ka zomo*. Enough of ignoring reality! Silence is complicity!

Lamien, our call is to set a worthy example of being Mapuche to *pu wechekeche pu ulchazomo* (young children). To be at the height of the anti-capitalist conflict, anti-neoliberal, anti-extractivist and anti-patriarchal! The *lamien* of the *wallmapu*, we are not alone, we are one with the *Itro fill mogen* (life interconnected with nature) and we will take the legitimate path of self-defense!

Petu mogeleiñ mollfun Janekeo!

Pewü 2021, Wallmapu

Glossary of Mapudungun (Mapuche Language) terms

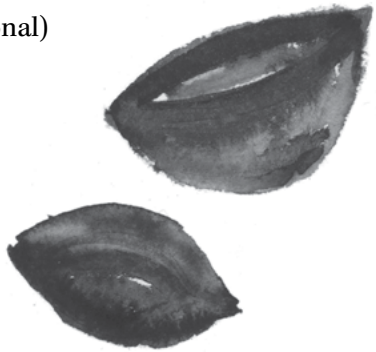
Az Mogen: ethics of living
Abya Yala: term used by the south American Indigenous people to refer to the Americas
Feyentun: belief
Itrofill mogen: life (all things interconnected by nature)
Lamien/pu lamien: sibling or friend (singlular/plural)
Lawen: medicinal plants
Lawenñgelu: traditional healers and medicine makers
Lof: extended family or clan
Kuifi Kimun: old knowledge
Kuifi Rakizuam: old wisdom
Kumeche: good people
Machi: religious and political leaders of a Mapuche community
Newen: Spirit
Ñgenpin: traditional teachers of ancestral knowledge and wisdom
Ngulamtuchefe: land spirits/ earth beings
Norgche: ethical people
Pichikeche: childen
Rakizuam: knowledge
Reche: authentic people/ real selves
Ruka: home
Trxfkin/trxfkintu: Exchange/ an event to exchange
Wallmapu: Mapuche term for territory
Waria: city
Wechekeche/uchazomo: young boy/ young woman
Wentru: Friend
Weychafe: warrior
Winka: colonizer / Chilean
Zomo: woman

Recipe

Black Walnut Dye

...you will need...

fresh, green black walnuts
a large pot that's used only for dyeing
(stainless steel is best)
somethin for stirring
stuff to dye
gloves
mesh bag (optional)
water and heat



The gift of color that plants so generously offer us is one that is often under-appreciated. Our knowledge of the botanical kingdom is usually limited to the plants we can ingest as food or medicine. By entering into the world of natural dyeing we can begin to remember another vital way of being in relationship with plants. When one asks a plant if they would like to give themselves to color, their loud response often suggests that this too is something that they are deeply missing!

The range of shades that natural dyes can create are unmatched by synthetics, and the process of working with plants to unleash their color is truly something magic. There are many flowers, nuts, barks, lichens, "weeds", and even kitchen scraps that can be transformed into dyes using only water and heat. Generally, protein fibers (materials that come from animals like wool and silk) absorb dye easier than cellulose fibers (materials from plants like cotton, hemp and linen) synthetic fibers are a wild card! Ya never know what you'll get to stick on those...

One easy plant dye that plays well with all types of fibers is black walnut. The colorant lives in the green outer hulls that surround the nut and is considered a direct dye, which means that a mordant (substance that acts as a binding agent between fiber and dye) isn't necessary. Black walnuts can create colors ranging from light yellow to brown to completely black.

1. Starting in late August and going into October, gather the nuts right off the tree or after they are freshly fallen, as the green ones work best. A good rule of thumb is to aim for at least twice the amount of dye stuffs as material you wish to dye, with three or four times the amount yielding even richer hues.... wear gloves unless you don't mind stained hands! Most often, plant dyes like things looooooow and slooooooow so plan for a few days of dyeing.

2. Throw the whole nuts into a mesh bag if you have one, (helps keep them from sticking to your materials as they break down) put them in your pot and cover with cold water. Set

the pot to medium and simmer for a few hours to encourage the dye to release from the hulls. Let cool completely or over night.

3. Thoroughly wet the items you wish to dye and wring out excess (this helps to achieve an even color) and add to your vat. Set the heat to low, adding more cool water if needed to keep everything submerged. Heat slowly and stir often, smashing the nuts down and moving your things around. Keep that up for at least for a few hours. If you want a lighter tone start checking on your stuff soon after adding it to the vat but keep in mind the color will fade some after a rinse and wash. Once you feel like it's gone on long enough turn the heat off and let the whole thing sit over night. By the next day if the color isn't to your liking you can repeat the heating and cooling process.

4. Put your gloves on and rinse your stuff in cold water till it runs clear. If you have dyed yarn or anything delicate, stop here and hang it to dry. Throw any fabric or clothing in the washing machine for a cycle. The dye shouldn't bleed at this point but it's still wise to wash on cold with dark colors. Hang dry.

5. It is sweet and fun to go show the plant(s) you gathered from the color that they gave you, as a gesture of thanks and a celebration for the things you can make together.

"In the small southern Indiana city of Evansville the experience of time and patterns shifting feels inevitable and confusing. Living in a post industrial urban setting we purchased empty lots scattered around our neighborhood. The infrastructure for growing is based on the abandonment patterns of capitalism's history. For years I used to carry two five gallon buckets of water five blocks twice a day in August furring the yearly droughts. But weather patterns have shifted and August has more moisture. I haven't tested to measure rainfall, I've just experienced a shift in rhythm. The french urbanist Henry Lefebvre and the Greek urbanist Stavros Stavrides write about "rhythmic time" and "ritualistic time", respectively. When I carried buckets to water young perennials I walked through the neighborhood and noticed the shifting relationships of people being evicted, squatting, fighting, or playing together. I touched every plant and the soil at its roots. I dreamed deep long daydreams about the growth of a new way of living. Those plants are older now and bearing fruit; they'd survive a drought now even if we still had them. We bought condemned houses next to garden lots to use for food processing and the water spickets. I go to the gym and do the "farmer's carry" with dumbbells. Now the pattern we're trying to find a rhythm in is how to adjust the propagation of these mature plants to the new seemingly random freezes that rush in and out sporadically these winters. And how to ritualize the care and growth of a neighborhood experiencing new patterns of gentrification and the time away at work that cost demands."

Wassailing the trees

brush

At our land project outside of Portland OR, some members with ancestors from the British Isles host a public event each winter, sometime between January 6 and 19, in which we bless the fruit trees of our orchard. Here's a version of what we say.

Welcome, old friends and new! We are here to celebrate our fruit trees, our apples and pears and plums; to begin their return from dormancy to fullness.

But why in this way, filled with half-remembered folkways of England?

We are on the ancestral lands of the Atfalati Kalapuya and the Clackamas Chinook. Their descendants continue to tend these lands as members of the Grande Ronde, Siletz, and other tribal nations. But that relationship has been deeply impacted by colonization. Many of those standing here in this circle have ancestors that came to these lands as settlers — not so long ago. They brought genocide. Disease and massacre.

And they brought fruit trees.

The oldest European apple tree in these parts is still (sort of) growing at Fort Vancouver. That was a place of hardship, the center of English colonizing, and also a rich and complex place of overlap between many peoples. The language spoken by most people there was a mixture, based on Chinookan. Peoples survived during a time of disaster.

What does it look like for the settlers among us to be part of unsettling that disaster?

We've learned from our elders and friends that it begins with remembering. Remembering the genocide. Remembering the peoples here before, still here now, here for the generations to come. But also remembering that our own ancestors and relatives, who brought the apocalypse, also originally came from land. Who were they? What were their memories and their ways? Are there semi-hidden remnants of

land-rooted lives? Not dodging the horrors, but looking beyond them, deeper, further.

All of us have ancestors who were earth-people. And if we are to be ancestors of peoples becoming again earthbound, we are called to be a hinge that swings backward as well as forward. A hinge that changes the story, unsettles the arrow of "progress" and pain. Remembering, reknitting the tissue that roots us in the land.

By the time these English songs and landways were written down, the ruling English were already colonizers — of Ireland, Wales, Scotland, and soon Turtle Island, too. But the people of the countryside then (and still a few even now) remembered many ways hearkening to earlier lives woven with groves of trees and holy waters. That through waves of warlords and witchburnings remained, waiting. This practice is one of those ways.

Tonight, we pass among the trees in groups. We offer them cider from last year, we touch them, we thank them, we love them, we sing.

And we pray: *"Before our ancestors were settlers, they were people of the earth."*

Illustration by Rae (@foxandfernpress)

Wassailing the Trees

Old English "Wæs þu hæl": Be thou hale.
For children of Britain now living as part of Turtle Island, a prayer:
"Before our ancestors were settlers, they were people of the earth."

Songs from the Home Orchard Society newsletter

Old Apple Tree

This has the first line "Old apple tree, we'll wassail thee...." although it is also called the Apple Tree Wassail. The words and music are from William Crockford, of Bratton, Minehead.

Old apple tree, we'll wassail thee,
And hoping thou wilt bear.
The Lord does know where we shall be
To be merry another year.
To blow well and to bear well
And so merry let us be;
Let every one*
drink up their cup
And health to the old apple tree.

Spoken:
Apples enow, hatfuls, capfuls, three-bushel bagfuls,
tallets ole fulls, barn's floor fulls, little heap under the
stairs.§

Hip, hip, hip, hooroo!
Hip, hip, hip, hooroo!
Hip, hip, hip, hooroo!
(Shout, stamp and fire off guns).

Wassail the trees that they may bear

This seems to have been done in some places upon Christmas Eve; for in Herrick's Hesperides, there is the following among the Christmas Eve ceremonies:

"Wassail the trees, that they may bear
You many a plum and many a pear;
For more or less fruits they will bring,
As you do give them wassailing."

Here We Come A-Wassailing (Apple Version)

This has the first line "Here we come a-wassailing among the leaves so green...," similar to a wassailing song sung at the Winter Solstice, but this song has verses about apples & it has a slightly different tune.

Here we come a-wassailing among the leaves so green,
Here we come a-wandering so fairly to be seen,
Now is winter time, strangers travel far and near;
And we wish you, send you, a happy new year.

Bud and blossom, bud and blossom, bud and bloom and bear,
So we may have plenty of cider all year.
Hat full's and cap full's and in bushel bags and all
And there's cider running out of every gutter hole.

Down here in the muddy lane, there sits an old red fox,
Starvin' and shiverin' and lickin' his old chops.
Bring us out your table and spread it if you please,
And give us hungry wassailers a bit of bread and cheese.

I've got a little purse and it's made of leather skin,
A little silver sixpence, it would line it well within,
Now is winter time, strangers travel far and near;
And we wish you, send you, a happy new year.

Apple Howling Chant

Apple Howling is especially the custom in Sussex, where it is reported possibly as early as 1585 CE. Boys would encircle the trees on New Years Day, howling and beating them with willow whips. This chant is said to be from the 19th century, from Sussex, Surrey. The first verse is chanted (three times) so there is no music.

Stand fast root, bear well top.
Pray good God send us a howling good crop.
Every twig, apples big,
Every bough, apples enow.

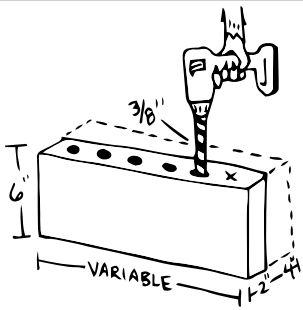
(and then shout!)
Hats full, caps full
Five bushel sacks full
And a little heap under the stairs
Holla, folks°, holla!
(and blow the horn!)

Notes on language:
° Originally "boys".
* Originally "man".
§ A tallet is a loft where apples are stored; the word is borrowed into English from Welsh. The last line should probably read, "tallets all full, barn floors full, a little heap under the stairs."

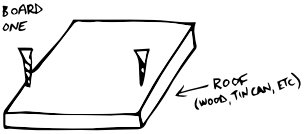
HOW TO: MASON BEE HIVES

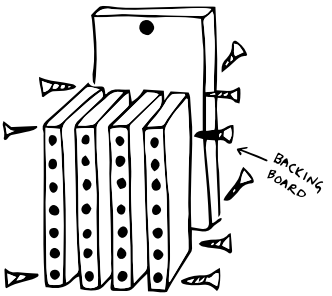
Quick'n DIRTY #2

There are 130 species of Mason bees (Osmia) out of the thousands of pollinators throughout North America. The Mason bee is part of the Apidae bee family, which also includes the most familiar pollinator the honey bee (Apis melifera). Unlike honey bees who are a collective social bee, in hives of tens of thousands, the Mason bee is solitary. They pollinate plants up to a 300 feet radius of where they nest and an individual Mason bee has much higher pollination rate than an individual honey bee due to the way they carry pollen, on their lower abdomen rather than on the backs of their legs. Mason bees nest in small holes most commonly in trees or logs that were already created by woodpeckers and insects. They forage throughout the warm months, mate with a male (who only lives for up to 2 weeks to mate then dies), gather about a pea size amount of pollen for each egg, lay the egg next to the pollen, find mud to build up a protective barrier (where the name mason comes from). She will do this in succession in about two tubes and lay about 15-20 eggs in her life span of 6 weeks, then dies. The baby bees pupate and are fully developed by the fall, hibernate through the winter then emerge from their coccoons in the spring. If you would like to invite more pollinators to your home but might not want or have space to have a full fledged bee hive, making Mason bee habitats are a great low maintenance way! There are many different ways to make a Mason bee hive, here are two examples...

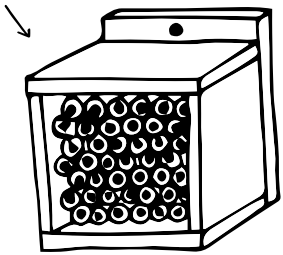


WITH A 3/8" DRILL BIT, DRILL HOLES ON 2" OR 4" FACE OF 2x6" OR 4x6" PIECES OF WOOD. SPACE HOLES 3/8" APART. DRILL HOLES ALL THE WAY THROUGH. SCREW TOGETHER ALL 2x6" BLOCKS. SCREW ON A BACKING BOARD THAT IS TALLER THAN BLOCKS FOR ONE WAY TO HANG OR MOUNT.





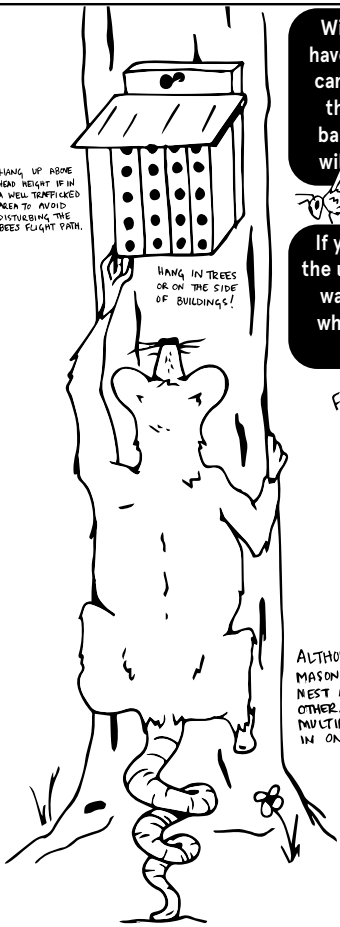
ANOTHER METHOD USING PAPER STRAWS OR HOLLOW BAMBOO (DONT USE PLASTIC, IT WONT BREATHE!). STRAWS OR BAMBOO CUTTINGS CAN BE BUNDLED INTO A WOODEN FRAME.

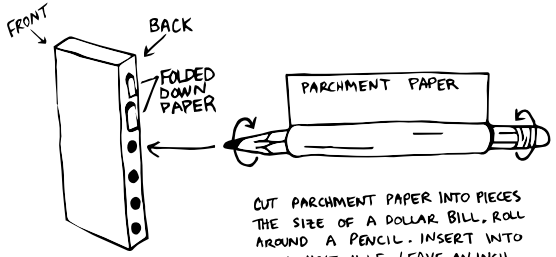


IF YOU DONT MAKE A ROOF BE SURE TO HANG THE HIVE UNDER AN AWNING, TO PROTECT IT FROM MOISTURE THAT MAY CREATE AN ENVIRONMENT AT RISK OF MOLD, FUNGUS & PESTS.

With any Mason bee hive method, if it appears that the holes have been built up and bees are no longer nesting in them, they can be cleaned out for future Mason bee inhabitants. Take off the backing piece, drill out the mud, or take out straws and bamboo cuttings, clean them or replace with fresh ones. This will also help protect the bees from mites and fungal threats.

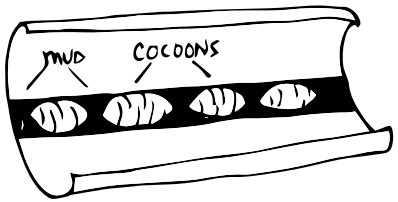
If you'd like to get even nerdier with Mason bees... and due to the unpredictability of an ever quickly changing climate, another way to insure that the bees are emerging from their cocoons when there is an abundant food source, is to line the wooden holes (or bamboo cuttings) with paper.





CUT PARCHMENT PAPER INTO PIECES THE SIZE OF A DOLLAR BILL, ROLL AROUND A PENCIL. INSERT INTO EACH HIVE HOLE. LEAVE AN INCH HANGING OUT THE BACK & FOLD OVER. (THIS IS WHERE YOU WILL PULL IT OUT WHEN IT GETS COLD).

ALTHOUGH SOLITARY MASON BEES LIKE TO NEST NEXT TO EACH OTHER. CAN HANG MULTIPLE HIVE BOXES IN ONE AREA.



Then, In the winter after all the eggs are laid and cocoons have developed open the back of hive. Pull out each roll of paper. Open and collect the healthy cocoons. Place in a breathable cardboard box and place in a refrigerator. Leave in the fridge until there is no fear of another cold snap. When warm, Make a hole in the side of the cardboard box and place in a shaded, dry area. The bees will emerge from their cocoons within the box, leave from the opening, begin foraging and start their life cycle!

In the Blistering Heat

ocotillo

The land is alive.

This notion sounds simple and perhaps even obvious, but in practice the land is often treated as if it is a dead mass waiting for human development. This is especially true in the desert where we see a long stretch of abstraction born into reality -- the U.S.-Mexico border wall. But the land is inundated with organisms living and breathing together in time with the rhythm of the soil. It is alive and not because we will it to be and not because it aligns with human ideas of progress - the land is a body with its own agency, its own choices, and its own way of being that is both intrinsically tied to and independent from people.

Conversations about the ecological impact of the border wall often ignore the land's agency. The border's long-term implications upon the ecosystem surrounding it become an issue centered around the reproduction of colonial violence powered by techno-industrial horror. A group of environmentalists have proposed to replace the border wall with "a sea of solar panels," as referenced in the book, Humanity and Hope in a Contested Land. Although the proposition is overlaid with a

thin layer of concern for border communities, there is a larger animal that breaks its head through again and again: the humanistic desire to reify domination over the land, animals, and people who are cut out of the category of "human" at will.

Identity necessitates borders – what it is and what it is not to "be" a certain identity – and to define "humanity" as an identity requires us to define what is and is not human. Therefore, in defining the boundaries between human and non-human beings, this boundary ruptures the connection not just between people and land or people and animals, but people from the ecosystem. People from earth. Even within the confines of the human identity, we have observed how, throughout history, entire groups of people were and are cast out of the bounds of what is "human" -- the humanist project itself becoming a driving force in the colonization and genocide of these beings who are not included within this identity. Thus, I'm inclined to think that the title "Humanity and Hope in a Contested Land" has nothing to do with Indigenous people, nor does it have much to do with what is necessary for the land to thrive, but rather, it is a testament to the continued pillaging of the land that upholds humanism, ideas of progress, and colonization while positing itself as the eco-friendly vision for the "future."

The "solar wall" aims to stimulate the border economy by providing

"green jobs and energy." Logistically, this proposition is largely untenable but is worth noting because it highlights the liberal poverty of imagination: it assumes that because the border presently exists, it must always exist. However, border is a logistical operation which becomes metaphysical in its enforcement; it validates the existence of the state while seeking to control all possible moments of time and space, its shadow following individuals far beyond the borderlands to establish its own omnipresence.

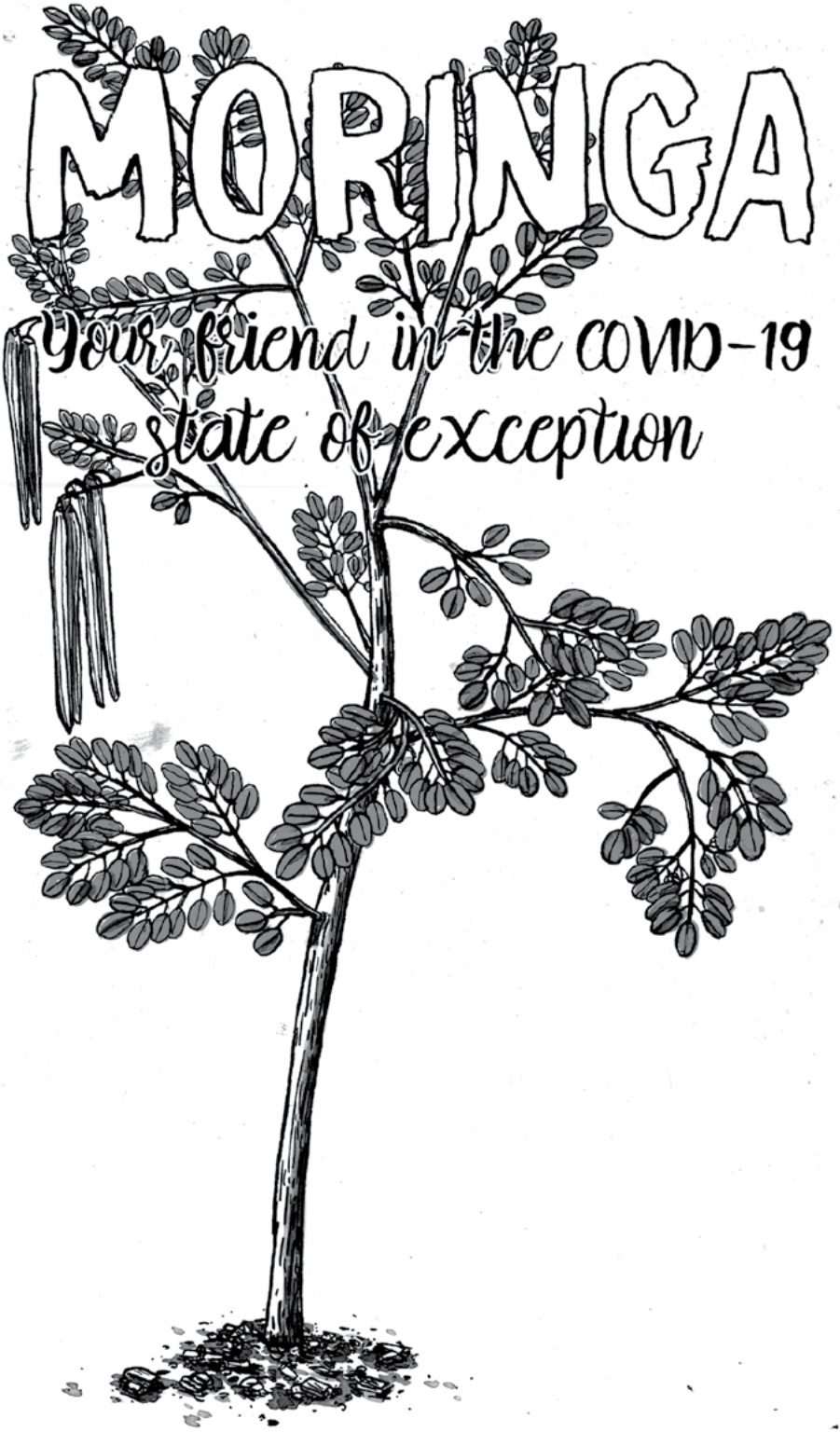
Even if the wall changes physically, the logistical enforcement of the border would only shift to accommodate this. Counterinsurgency along the border would bend towards "progressive policing," and while environmentalists make empty land acknowledgments, the fundamental violence of the border remains. Although this proposal pays lip service to Indigenous people and land, maintaining the border in such a way that erases settler guilt prevails in importance. The proposition is not about improving anyone's lives, but more so improving conditions to better support an economy that strangles its peripheries.

Further, green technology is far from "eco-friendly." Like most of what technoindustrial society propagates as "solutions" to the problems it itself creates, solar panels are ultimately laid to rest in landfills where they continue to leech toxic chemicals into the earth. When it is explained that this "solar wall" would provide "solutions" to the ecocide happening along the border, what they really mean is that we would be able to more adequately sustain the lifeway of techno-industrial civilization. The idea that solar panels would stop or reverse the damage that has already been done would falter as the continued destruction of the land would be reflected in the observably suffering ecosystem.

This then begs the question: what about the land itself? To many, the "ecological benefits" of this plan might sound like a feasible solution to environmental crisis at the border, such as growing crops under the panels. However, this vision alludes to some glaring factors that are never named outright: the power dynamics and structures that would make this possible, once again reifying the state and institutional power that harms border communities and land without calling these structures into question. Additionally, this vision still implies an exploitative relationship to the land. Within this framework, the

land loses its autonomy as it cannot ebb and flow as it's meant to; it cannot breathe in its natural rhythm but instead is forced to operate on the terms of people who are not interested in building a relationship which does not inherently deplete the land for their own benefit. Clearly, the goal is to reproduce a lifeway that destroys everything in its wake, beginning with the land and finishing with humans. Their vision is not to liberate the land; it's to extract as much as possible in the name of humanitarianism. The land's agency is stripped away, and the consequence is an ecosystem on its last legs before extinction.

What will it take to escape the humanist nightmare of civilization? The goal here is to leave with more questions than answers, to dig deep into the parts of ourselves we deny through reproducing this reality. While liberals dream of a so-called future that's rife with the same dead soil that propagates colonial terror, where are the avenues, the liminal spaces, where the rest of us can enact a wildness that sets flame to their dreams.


MORINGA
Your friend in the COVID-19
state of exception

MORINGA: This tenacious tree has a well deserved reputation as a super food but dont give half your paycheck to Bezos, grow it yourself! Moringa is a willowy, fast growing tree that will do great with little fuss up to USDA zone 9, anywhere colder than that it can be grown seasonally. Farmers throughout the world rely on moringa for its heavy yields, nutrient density and adaptability to poor soils and growing conditions.

Moringa is easily propagated through seeds which can be found for cheap online.

For best results soak the seeds prior to planting, then sow in directly when the nights have gotten warm, or start early indoors in a soil filled dixie cup or similarly deep vessel (dont forget to poke drainage holes at the bottom!).

LEAVES can be harvested as soon as the plants have gotten bushy and established. Eventually the trees will begin producing large edible bean pods or "drumsticks" If you are interested in this crop then youll want to let the plant grow into its tree form, if you are only interested in leaves moringas can be planted close together and harvested back for maximum production.

The leaves themselves contain three times the protein and 2x the iron of kale and can be eaten fresh in salads, cooked as a green or dried and processed into supplements.Perhaps less well known in the so-called united states, the drumsticks also make a fantastic edible. Popular in many parts of south and southeast asia, the drumsticks are usually chopped shortways into long cylinders and stewed. The drumsticks can then be peeled open and the softened seed and inner pulp scraped off with your teeth like you would eat an artichoke leaf.

MORINGAS are indifferent to neglect, so they make a good candidate for guerrilla gardening projects. Just make sure the plant gets water when its young. Find a good lot or equivalent neglected space in your neighborhood and start producing healthy food for your whole block. Try planting densly as an easy super productive living fence or let a few grow out and plant fruiting vines beneath to grow up their supportive scafolding like banana passionfruit or grapes.

No one tool alone can liberate us. The only way to weather the coming crisis is to link up, share skills, fight together, refuse recuperation and plant the seeds of a better world.

Recipe

Tacos de Ciervo *(Venison Tacos)*

(de Vanessa y Vittorio)

Ingredients:

Venison steaks
Garlic
Oil
Apple cider vinegar
Cayenne peppers & other chiles
Tomatoes
Onion
Lemon
Tortillas

1. Cook some venison steaks with garlic in oil with apple cider vinegar. As they cook, cut them into very small pieces.

Sauce:

2. Boil tomatoes with garlic and salt in water until they start to pop open.
3. Heat oil in a pan and blacken a few cayenne peppers or other chiles.
4. Scoop the tomatoes out of the water and put in a blender with chiles and a small amount of the water from the tomatoes.
5. Top the tacos with finely chopped onion mixed with cilantro, lemon and salt. Buen provecho!

Pio's Salsa

Ingredients:

Tomatoes
Hot peppers (like jalapeños)
Garlic
Salt
Cumin

1. Heat oil in a pan and sautée the tomatoes, hot peppers with the stem off, cayenne (very spicy!), garlic (whole cloves). Stir so it is blackened and blistered on all sides. The more blistered the better!
2. Food process it all together; just pulse to the consistency you want.
3. Add salt and cumin, maybe paprika.

If you are using very hot peppers, use a blender instead and make it smooth, adding more oil while blending.

Variations:

Tomatillo Salsa -- Use tomatillos instead of tomatoes, and add onion if you want. You can also add in cilantro for flavor and green color.

Salsabaza -- Use zucchini instead of tomatoes. You can boil the zucchini instead of frying.

Chicken-of-the-woods Tinga

Ingredients:

Onion
Garlic
Chicken of the woods
Clove
Oregano
Chipotle
Cumin
Red Wine
Tomatoes

1. In a slow cooker, put onion, garlic, mushrooms, and add spices: clove, oregano, salt, chipotle, cumin, and a splash of red wine.

2. Then separately boil tomatoes (make an x on the bottom first so that you can take off the skin), peel the skin and blend it with one chipotle until smooth and thick.

3. Add this to the slow cooker.

4. Enjoy.

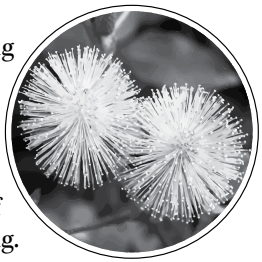
2022 2022 2022 2022 TAROTSCOPES 2022 2022 2022 2022

Hibiscus

ARIES

Do not resist change. March forward towards the unknown with the truth of wisdom at your side. Each challenge is an opportunity to know yourself. Keep your busy mind happy with creativity rooted in repetition. Address each challenge one at a time. Multi-tasking will slow your progress to a near halt. Make time to define what it is you truly value and live in service to what you believe. Pleasure will be found in the prosperity of the mundane. Make dinner for others at the turn of each season to fill your home with love. Giving isn't so much about return as much as it is about strengthening your bond to your kindness. Get to know Angelica and take her advice to keep moving. You'll be surprised what is around the bend waiting for you.

TAURUS



Mimosa

No one is coming to save you so show up to yourself. Choose hope. California Poppy when grief feels threatening. Gently lead others to hope and watch grief gently leave your body. Power will be found in intellectual excitement and idea exchange. Don't commit to that which does not fill you with joy. Time is on your side so take time moving through movements of rituals that set the stage for a manageable future. Nothing for yourself that is not for others, meaning what you build will be best supported by your community and support your community. Pickle something this year and share the extra. Look to the sky when you feel lost and remember to relax your shoulders. Passionately engage with yourself and then expand. Give ideas actions. Give alone time intentional joyful structure. Look to love and lead with love.

GEMINI

Preserve your energy for this enormous transformation you have been preparing for. Guard yourself from psychic theft by not engaging in empty victories. Know when to walk away as knowing yourself is simply enough. Inner strength will be cultivated through engaging your inner child. Make sure to play. Eat every in-season fruit and share your bounty with others. Sharing food and good times builds strong bonds. Share sensitive information thoughtfully and cautiously. Messages will be the strongest in the astral plane so make sure to get

Pitcher Plant

good sleep; let valerian guide you. Privacy will allow you to fully pursue your passions and more deeply understand your truth. Savor your alone time and a slow reveal of your new self.

CANCER

Swamp Iris

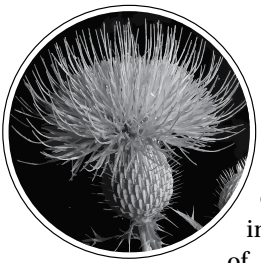
Opportunity is the prayer answered. Show up to each opportunity and apply the skills you have been working so diligently on. Be emotionally flexible and spiritually and mentally resolute. Your strength is in vulnerability. You'll never get a flower to bloom by pointing a weapon at it. Water is your element and your ally. Study water. Study movement. When you feel stuck, move your body. Cayenne to sweat it out. Turmeric to help ease confusion. Decisions are best made when you give your emotions time to settle. Put yourself in water to shake stagnation and to celebrate hard won victories. Celebrate your inner strength with affirmations and let those words you speak to yourself fortify your creations.

LEO

Answer to your highest and best self. Your biggest question this year is: Who/What has shaped your values and why? What is it that YOU think? Move away from pain through clarity of your values. The better acquainted you are with yourself the harder it is to knock you off your center of gravity. Cultivate inner strength by facing all situations in a timely manner. Don't avoid confrontation or truth. Don't wait.

Bird of Paradise

Give your anxious feelings catnip. Sit by a tree when you need advice. Wake up and write. Write lists, ideas, feelings. Give what sits in your mind small action. Let those small actions push you forward. Empathy and understanding are your swords. Stay close to your elemental magic by making fires and tending them carefully.



Thistle

VIRGO

Relationships are not the measure of your worth but instead are a litmus of your integrity. Communicate truth with a little honey on your tongue. You are going places you have never been before, so travel light. Don't hold yourself or others to the past this next big cycle. Let everything be new. Find the rose pushing through concrete and water it. Let the depth of who you are outshine any pain that rises. Let positive actions create new truths. Intellectual strength is your home. Let the power of your mind be a shawl of safety that you carry into unknown territory. Force is not your ally, curiosity is your new best friend. Expansiveness is key.

Spanish Moss

LIBRA

Distinguish the difference between autonomy and compulsory independence. Rejecting people is not inherent to enjoying solitude. Accept opportunities to support and uplift others. Allow a passionate pace to speed along indecision. Make decisions with integrity in mind. Each day is a new day to shape who you want to be. Be intentional. Take motherwort for temperance and remember to enjoy what you have, who is in your life and the many opportunities that flow your way. Gratitude completes a spell cast in the past. Let the past blossom into wisdom. Wisdom is trusting that you are prepared to receive each moment as it comes.

SCORPIO

Prickly Pear

The wounds carried are your direct line to spirit. Wounds projected onto others are like a missed phone call. Answer the phone, spirit is calling. Follow love and answer love's call too, not just in the romantic sense but also in how you move through this existence. Let roses spill from your mouth. Sit by a willow tree and let the deep well of imagination and emotion flow. Let confidence root in the truth of your talents. Forgive, not out of guilt but to relieve yourself of the burden of anger. And from there be led out of your comfort zone to somewhere else. Somewhere you have never explored before. Discomfort is your friend. Let it be just the nudge you need to make the moves to answering that call you've been avoiding.

Banana

SAGITTARIUS

Allow rigidity to leave your mind and soften stubborn patterns that prevent goals from coming to fruition. How can you move forward towards the future with one foot stuck in the past? Willpower is your biggest ally in this next big cycle. Give authentically. Give with boundaries in mind. Define what in you is true and what is compulsory. Be led by the truth of your desires. The future failure you fear does not exist. Act and embody victory. Envision accomplishing your goals. Pick, take internally or smudge with vervain to ease tension. Nettles because shit happens and sense of humor is the only way through it sometimes. Let go. Be changed. Listen closely because there are messages. Locate the light inside you, really, actually envision the light the emanates from you and follow it around. Commit to what you are doing. Don't wait for a catalyst, be the catalyst.

AQUARIUS

Maypop

Speak honestly and carefully because you will reap what you sow. Don't make spells out of reactions. The surface of your initial emotions is beckoning you to go deeper, actually. Celebrate your small victories with an altar decorated with flowers and confetti and be as nice to yourself as you are hard on yourself. Give your difficult emotions over to a body of water. Protect yourself by cleansing stagnation, not by closing off your heart. Grow sage in your garden and use what you grow. Where truth takes root so does righteousness. Balance your ideas against your intuition and cultivate trust in your relationships. Receive feedback (as in generative) and compliments graciously because both are sure to be in abundance in this next cycle.

Magnolia

CAPRICORN

Sanctuary is in spirit, the physical home and in joy. Draw the sanctuary of joyful relationships through good words. When criticism begins to spill from the tongue, ask yourself: is it kind? It is helpful? Is it necessary? Then proceed. Make your home a place you want to be. Stability will be found in the comfort of fours. Four walls in a room, four legs of a bed, four corners of a blanket. Rest will be important. Rest and trust go hand in hand. When you are rested you can trust your instincts. Research your ancestors and cleanse your home with the smoke of your place of origin. (Even if you don't know, you know.) Above all don't deny yourself pleasure or joy. Even in the face of great upheaval or sadness joy must be a priority. Release! You're growing! Throw a party for yourself or someone else. Celebration is one of the rituals that makes life worth living.

Spider Lily

PISCES

Now is the time to engage. Don't shy away from challenges, instead be present with each individual task that must be accomplished. This year there will plenty of opportunities to do good, so show up and choose who you will be in all moments. You won't be able to change what is happening around you so don't swim upstream, learn to flow with currents and learn to anticipate changes through embodiment. Cooperate with nature and learn to use your non-dominant senses. Learn to cook things you don't usually eat. The processes of unfolding into this new sense of self will take time. Keep Passionflower tincture handy for when you want to rush through what is difficult. Guard your alone time and do not be deterred by setbacks. You've laid the foundation for who you want to be, so be.

January

All data specific to New Orleans, LA

DAY OF MONTH	MOON	SUNRISE	SUNSET	SOLAR NOON TIME	SOLAR NOON ANGLE	DAY-LIGHT HOURS
1		6:56am	5:11pm	12:03pm	37°	10h16m
2		6:56am	5:12pm	12:04pm	37°	10h16m
9		6:57am	5:18pm	12:07pm	38°	10h20m
15		6:56am	5:22pm	12:09pm	39°	10h26m
17		6:56am	5:24pm	12:10pm	39°	10h28m
25		6:53am	5:31pm	12:12pm	41°	10h38m
31		6:50am	5:36pm	12:13pm	43°	10h46m

JANUARY 8, 1811

On the East bank of the Mississippi River outside New Orleans, the largest slave insurrection in U.S. history began, led by Charles Deslondes, an enslaved man from Haiti. Hundreds joined the uprising and marched armed with hand tools, burning several sugar houses and five plantation houses before being brutally suppressed.

TREE OF THE MONTH	Witch hazel, *Hamamelis virginiana*
JUST FUCKING GOOGLE IT	BC Faller Training Standard Videos

JANUARY 21, 2014

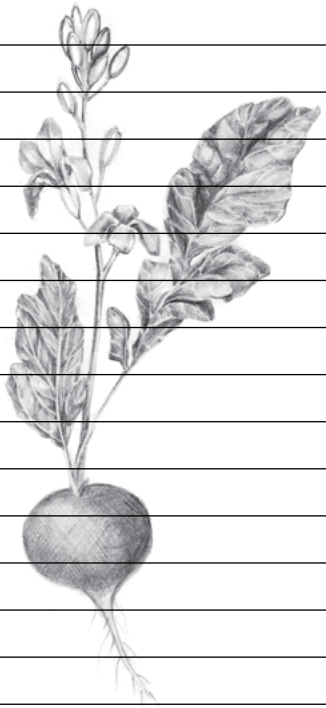
Kurds in Rojava officially declared autonomy for three separate cantons of Cizîre, Kobanê, and Efrîn. Tens of thousands of acres of formerly state-owned land was redistributed to cooperatives. In Cizîre, where the Syrian state had banned vegetable and fruit-tree planting in order to run the region as a monoculture wheat "breadbasket", cooperatives planted 50,000 fruit trees in 2015 alone.

Notes from a first year forest farm in southwest Mississippi

1/2/21
Moved chestnut to other side of brush fence on ridge and planted another
1/5/21
Planted 3 more hazels on ridge and fenced+cleared
Need more cover
1/19/21
Full on measured all trails and finished map
1/20/21
Start hypothesizing zones
Cleared the beginnings of two new terraces uphill from the trailer
Plans for workday tomorrow:
Clear out on contour across terrace 1 or 3
Work on roof
Fell trees for bolts
1/21/21
Cleared some
About halfway on installing tin
1/25/21
Clearing, bucked up some bolts
1/26/21
More clearing, bolts
1/27/21
More clearing, bolts
1/28/21
Took a day off, Percy Quin State Park incredible
1/29/21
Cleaned up some of the brush fences, took down a tough tree all caught up in vines, pulled out tangled trees in full sun area

I took notes almost everyday I worked this year. I've found it enormously helpful to be able to look back and see what was done and when. It has helped me see mistakes and has been instrumental in having a more reciprocal relationship with the forest here. They show growth and learning to communicate with myself across time. I'm learning that imaginings and noticings are as important as lists of tasks completed. As embarassing as it is at times, I hope it's helpful as an example of notes from a first year mushroom farm.

Farm notes



February

All data specific to New Orleans, LA

DAY OF MONTH	MOON	SUN-RISE	SUNSET	SOLAR NOON TIME	SOLAR NOON ANGLE	DAY-LIGHT HOURS
1		6:50am	5:37pm	12:13pm	43°	10h47m
8		6:45am	5:43pm	12:14pm	45°	10h58m
15		6:39am	5:49pm	12:14pm	48°	11h09m
16		6:39am	5:49pm	12:14pm	48°	11h11m
23		6:32am	5:55pm	12:13pm	50°	11h23m
28		6:27am	5:58pm	12:12pm	52°	11h31m

Over 200 Oglala Lakota and members of the American Indian Movement seized the town of Wounded Knee, South Dakota, the site of the 1890 Massacre at Wounded Knee, beginning a 71 day occupation under siege by the U.S. federal government.

FEBRUARY 27, 1973

TREE OF THE MONTH	Longleaf Pine, *Pinus palustris*
JUST FUCKING GOOGLE IT	Chainsaw sawmill

FEBRUARY 12, 1958

Kurdish revolutionary Sakine Cansız was born in Tincelli, Kurdistan. Later a co-founder of the Kurdistan Workers' Party (PKK), she led a prison uprising in Turkey and spat at her torturer's face, later on adding "As a militant of a just cause, I was afraid to say 'ah.'" She was assassinated along with Fidan Dogan and Leyla Saylemez in 2013 in the heart of Paris.

2/1/21
Back pile
Sweetgum (bottom row) x8
Turkey Oak (2nd) x6
Turkey Oak (3rd) x4
Sweetgum (3rd, outside) x2
Sweetgum (4th) x6
Sweetgum (5th, in middle) x2
Trees are budding, seems early, could be last week had a lot of temps in the 70s

2/3/21
Back pile
Sweetgum x31
Oak x4
x2 [sandwich] Oak

2/12/21
Front pile
Sweetgum x13
Sweetgum x2
} *[sandwich]*

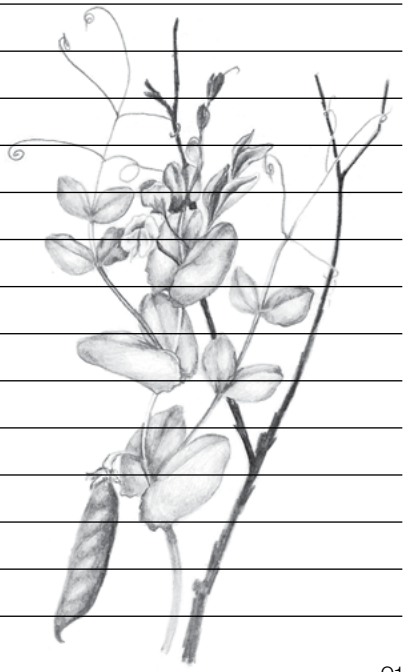
2/20/21
12.28 pile (8 week)
Not useful, lots of exposure, isolated tree species
1.26 pile (4 week)
1.27 pile (4 week)
} *Stored poorly, weren't kept dry*
1.28 pile (4 week) - bottom of pile
} *Inoculate this weekend*

Notes from a first year forest farm in southwest Mississippi

2/20/21 cont'd
2.1 pile (3 week)
Drying nicely
2.3 pile (3 week)
Top pile, close to tarp
} *Inoculate now*
2.12 pile (1.5-2 week)
Poorly kept
} *Inoculate now*

Fell trees for immediate inoculation asap
A few/day all week

Farm notes



March

DAY OF MONTH	MOON	SUN-RISE	SUNSET	SOLAR NOON TIME	SOLAR NOON ANGLE	DAY-LIGHT HOURS
1		6:26am	5:59pm	12:12pm	53°	11h33m
2		6:24am	6:00pm	12:12pm	53°	11h35m
10		6:15am	6:05pm	12:10pm	56°	11h49m
15		7:10am	7:08pm	1:09pm	58°	11h59m
18		7:06am	7:10pm	1:08pm	59°	12h4m
EQUINOX 20		7:04am	7:11pm	1:07pm	60°	12h8m
25		6:58am	7:14pm	1:06pm	62°	12h16m
31		6:50am	7:18pm	1:04pm	64°	12h28m

All data specific to New Orleans, LA

TREE OF THE MONTH Bur Oak, *Quercus macrocarpa*

JUST FUCKING GOOGLE IT The True Story of Kudzu

Notes from a first year forest farm in southwest Mississippi

3/2/21
Finished mushroom inoculation! Took 9 days and had a rotating cast helping out. Looks like we inoculated 123 Shiitake + Oyster, maybe another 15-20 Reishi and 12 stumps of Lion's Mane + Comb Tooth. I'll likely keep inoculating some stumps here and there. On saturday, we built 2 beds for the tree nursery and wednesday we started our first homestead bed. Lots of seeds started, going to just start putting stuff in the ground. When I get back in 5 days, I'm excited to get planting and clean up the detritus from the trees I took down for bolts. Really need to open up space to get planting up the hill! Don't forget those heeled in pecans.

3/8/21
Back up and most the starts dried and died

3/11/21
Finished the nursery (both sides)
Put some bok choy in the low bed (transplanted)
Seeded carrots & radish

3/18/21
Seeded jujube, black locust

3/22/21
20 Bitternut Hickory seeds started direct to tree pot, soaked the rest
Transplanted san marzano toms, cherry toms, baby bush watermelon, cucumber, maldive melon, brussels sprouts, tulsi, okra, yellow crookneck squash, chard

3/23/21
Repotted 40 asparagus
Cleared for a second fruit tree planting

3/24/21
Repotted: sage, big jim, yellow crookneck, cherry tom, san marzano, tulsi
Transplanted: fordhook chard, brussels, eggplant (ping tung long, LA long green)
Direct seed: cilantro, parsley, genovese basil
Started in pots: rosemary, lavender, poha berry, ring of fire, asparagus, shishito, cal wonder

3/25/21
Grabbed some chestnuts, pomegranates, bok choy, chard and squash from a bud
Grabbed some everbearing mulberries, fig, jujube from another fella
Transplanted: bok choy, chard + squash
Started to game out nursery bed in center of the nursery

Farm notes

April

APRIL 11, 2000

Following massive Indigenous resistance to the World Bank's project of water privatization in the city of Cochabamba, the Bolivian government repealed a law facilitating the water privatization. This rebellion, known as the Cochabamba Water War, sparked an insurrectionary left-Indigenous cycle of revolt that lasted for the next five years.

DAY OF MONTH	MOON	SUN-RISE	SUNSET	SOLAR NOON TIME	SOLAR NOON ANGLE	DAY-LIGHT HOURS
1		6:49am	7:19pm	1:04pm	65°	12h29m
9		6:40am	7:23pm	1:01pm	68°	12h43m
15		6:33am	7:27pm	1:00pm	70°	12h54m
16		6:32am	7:28pm	1:00pm	70°	12h56m
23		6:25am	7:32pm	12:58pm	73°	13h7m
30		6:18am	7:37pm	12:57pm	75°	13h18m

All data specific to New Orleans, LA

Occupy Oakland activists began an ongoing occupation of land owned by UC Berkeley and slated to become a Whole Foods grocery store. The occupation ultimately led to the creation of the Gill Tract Community Farm in 2013, which exists to this day.

APRIL 22, 2012

TREE OF THE MONTH	Honey Locust, *Gleditsia triacanthos*
JUST FUCKING GOOGLE IT	Old River Control Structure

Notes from a first year forest farm in southwest Mississippi

4/6/21
Planted 8 long leaf pine seedlings on the west and south-ish sides of the laying yard- hope to fill out the area inside that perimeter with loquat, magnolia and maybe a couple pawpaw

4/7/21
Started seeds: red bell pepper (CA wonder), ring o fire cayenne, slow bolt cilantro, anaheim chili, delaware creeping cucumber (EFN), sunflower (autumn beauty, evening sun, mammoth)

4/8/21
Dug a boomerang swale w/chestnut up on magnolia slope
Built nursery bed for rooting

4/9/21
Started dwarf palmetto, okra (annie oakley + kandahar pendi)

4/15/21
Buried my dog under a chestnut tree on magnolia slope

4/16/21
98 asparagus repotted
128 loquat (improved) started in bed A
29 red swamp maple (manchac)

4/16/21 cont'd
Picked yaupon
Fixed the berm by the grave site

4/17/21
Picked some yaupon
Attempted to root some yaupon

4/19/21
Planted 11 loquat, 1 elderberry, 1 magnolia (little gem) in laying yard

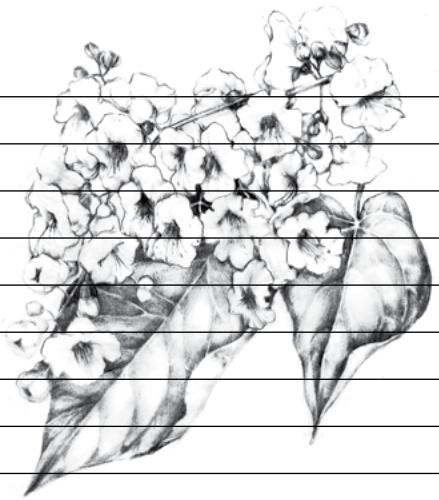
4/20/21
Cleared some of north hill orchard

4/22/21
Cleared more for orchard
Adjusted the timer (it started working)

4/23/21
Planted 35 hazelnuts (american)
Fixed the irrigation (kinda)
Put down some red plantain, spotted bee balm and marigold on the berms up on magnolia slope

4/29/21
Cleared east of nursery
Suspecting its a soil issue cause the black locust plants are hurting in bed B, yellowing and stunted growth
Hit them (maybe too aggressively) with fish emulsion

Farm notes



May

All data specific to New Orleans, LA

DAY OF MONTH	MOON	SUN-RISE	SUNSET	SOLAR NOON TIME	SOLAR NOON ANGLE	DAY-LIGHT HOURS
1		6:17am	7:37pm	12:57pm	75°	13h20m
8		6:11am	7:42pm	12:56pm	77°	13h30m
15		6:06am	7:46pm	12:56pm	79°	13h40m
22		6:03am	7:51pm	12:56pm	81°	13h48m
30		6:00am	7:55pm	12:57pm	82°	13h55m
31		6:00am	7:56pm	12:58pm	82°	13h56m

Following the murder of George Floyd by police three days earlier, an ungovernable crowd burned down the 3rd Precinct police station in Minneapolis.

MAY 28, 2020

TREE OF THE MONTH	Turkey Oak, *Quercus laevis*
JUST FUCKING GOOGLE IT	Septoria

5/5/21
Last night noticed Japanese Beetles (I think?) chewing up the plum leaves when we got in
Lots of the struggling annuals finally bolting
Ground nut growing in bed C
Cleared north of nursery, planted dunstan chestnut
Potted up 10 chestnuts grown from seed 4 Marrisard, 4 Bisalta, 2 Maraval

5/6/21
Planted 2 chestnuts in zone 1, in the camp stand planted a wild goose plum to the north of the chestnut and a pawpaw to the south, both got deer guard
Repotted about 20 asparagus and some okra
Decided to lay down a ton of compost mulch in the camp stand and start growing into it
Noticed the first jujubes popping up

5/11/21
Put down compost mulch for planting camp stand asap
Planted epazote, chinese spinach, tulsi, italian dandelion, oregano on magnolia slope, tomatoes + perique in nursery

Notes from a first year forest farm in southwest Mississippi

5/12/21
Planted 2 pawpaw, am persimmon, 2 lecont hickory, ussuri plum and am plum
Planted 175 asparagus

5/13/21
Started ~70 prunus americana, ~60 carya illinoensis, ~60 prunus nemaguard
Weeded the north slope, mostly poison ivy
Planted camp stand, transplanted: tomatoes, okra (kandahar pendi + annie oakley), chilis (ring o fire + big jim), comfrey, galangal, cucumber
Direct seeded: sunflowers, marigold, okra (green emerald), papaya, cowpea

5/15/21
Built a 4th nursery bed using compost mulch and a middle layer of compost soil mix
Started 114 prunus nemaguard

5/20/21
Cleared west side of lower north slope, need to continue tomorrow to clear room for a pecan + pawpaw
Planted sweet potatoes in zone 1, bed C and the upper north slope

5/23/21
Took down 5x 40' pines down west on north slope, some pine boughs went on mushroom log stacks

Farm notes

June

DAY OF MONTH	MOON	SUN-RISE	SUNSET	SOLAR NOON TIME	SOLAR NOON ANGLE	DAY-LIGHT HOURS
1		5:59am	7:56pm	12:58pm	82°	13h57m
7		5:58am	7:59pm	12:59pm	83°	14h1m
14		5:58am	8:02pm	1:00pm	83°	14h3m
15		5:58am	8:02pm	1:00pm	83°	14h4m
20		5:59am	8:04pm	1:01pm	83°	14h4m
SOLSTICE 21		5:59am	8:04pm	1:02pm	83°	14h4m
28		6:01am	8:05pm	1:03pm	83°	14h3m
30		6:02am	8:05pm	1:04pm	83°	14h3m

All data specific to New Orleans, LA

Hundreds of thousands of largely Indigenous peasants and working class protesters celebrate victory in the second Bolivian Gas War with the forced resignation of the neoliberal president of Bolivia, Carlos Mesa.

JUNE 6, 2005

TREE OF THE MONTH	Downy Serviceberry, *Amelanchier Arborea*
JUST FUCKING GOOGLE IT*	"DuckDuckGo"
JUNE 25, 1876	Celebrated as Victory Day, the Lakota and their Northern Cheyenne and Arapaho allies defeated the U.S. 7th Cavalry in the Battle of the Greasy Grass (Little Big Horn), killing 276 of them including their commander George Custer.

I was away for June.

Notes from a first year forest farm in southwest Mississippi

While gone, the privet, smilax and various herbaceous guys grew.

*but also google sux dont use google

Farm notes

July

DAY OF MONTH	MOON	SUN-RISE	SUNSET	SOLAR NOON TIME	SOLAR NOON ANGLE	DAY-LIGHT HOURS
1		6:03am	8:05pm	1:04pm	83°	14h2m
6		6:05am	8:04pm	1:05pm	83°	14h
13		6:08am	8:03pm	1:06pm	82°	13h55m
15		6:09am	8:02pm	1:06pm	81°	13h53m
20		6:12am	8:00pm	1:06pm	81°	13h48m
28		6:17am	7:56pm	1:06pm	79°	13h39m
31		6:18am	7:54pm	1:06pm	78°	13h35

All data specific to New Orleans, LA

TREE OF THE MONTH	Osage Orange, *Maclura pomifera*
JUST FUCKING DUCKSEARCH IT	Feral Atlas

JULY 19, 2012

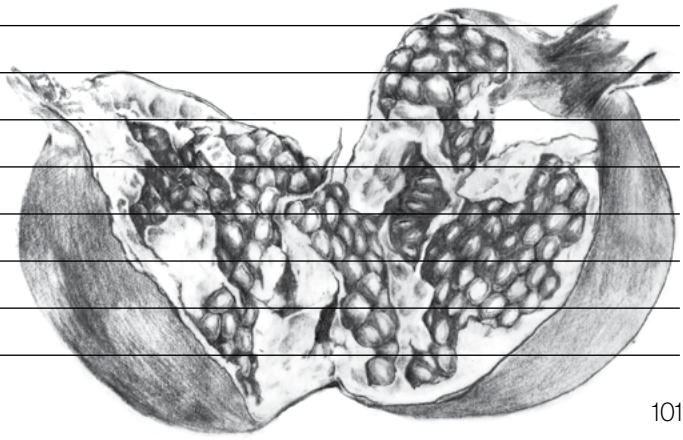
The Rojava Revolution began at 1 a.m. in the night when the YPG (Yekîneyên Parastina Gel or People's Defense Units) took control of the roads leading in and out of the city of Kobanî in what was formerly Syria. The people of Kobanî supported the action and occupied the state institutions as well as buildings such as bakeries. Forming a massive crowd to confront the regime's army stronghold, they convinced the soldiers there to surrender their weapons and go home.

I was away for July as well.

Notes from a first year forest farm in southwest Mississippi

Oh ya should've seen the privet and green briar. My word.

Farm notes



August

All data specific to New Orleans, LA

DAY OF MONTH	MOON	SUN-RISE	SUNSET	SOLAR NOON TIME	SOLAR NOON ANGLE	DAY-LIGHT HOURS
1		6:19am	7:53pm	1:06pm	78°	13h34m
5		6:21am	7:50pm	1:06pm	77°	13h28m
11		6:25am	7:45pm	1:05pm	75°	13h20m
15		6:27am	7:41pm	1:04pm	74°	13h13m
18		6:29am	7:38pm	1:04pm	73°	13h8m
27		6:34am	7:28pm	1:01pm	70°	12h54m
31		6:36am	7:23pm	1:00pm	69°	12h47m

TREE OF THE MONTH Ozark Chinquapin, *Castanea ozarkensis*

JUST FUCKING GOOGLE IT Kaninhop

The Green Corn Rebellion began in southeastern Oklahoma when white, Black, and Muskogee farmers and sharecroppers took up arms to stop conscription. They began by dynamiting oil pipelines and bridges in southeastern Oklahoma and creating a liberated zone where they ate, sang hymns, and rested. Their plan was to march to D.C., motivating millions of working people to arm themselves and join them in overthrowing the U.S. government.

AUGUST 2, 1917

AUGUST 14, 1791

The Haitian Revolution began in spirit with a torchlit meeting and ceremony led by enslaved leaders Dutty Boukman and Cécile Fatiman in the forest of Bois Caïman near the city of Le Cap. The only words from that night which remain to us are a prayer in Creole by Boukman: "The god who created the sun which gives us light, who rouses the waves and rules the storm, though hidden in the clouds. He watches us. He sees all that the white man does. The god of the white man inspires him with crime, but our god calls upon us to do good works. Our god who is good to us orders us to revenge our wrongs. He will direct our arms and aid us. Throw away the symbol of the god of the whites who has so often caused us to weep, and listen to the voice of liberty, which speaks in the hearts of us all."

Notes from a first year forest farm in SW Mississippi

8/4/21
Returned to a jungle
Lots didn't make it, some did, going to take days to uncover what did + didn't
Cleared the area around the trailer + part of the nursery with a machete

8/6/21
There's other fungi attacking/competing the shiitake and reishi - trichoderma and turkey tail
Started cleaning and shading the laying yard: raking around piles, clearing dead branches, shading with agfabric

8/7/21
Finished the temporary shade for the yard, just need to build something for reishi but that may have to wait

8/9/21
Very hot today (heat advisory 105° heat index)
Watered all non-irrigated trees
Weeded top terrace + asparagus

8/10/21
Hand watered all non-irrigated trees again (still hot over 105° heat index)
Ate a fig off that one by the driveway, incredible

8/15/21
Trim back septoria all over
Pulled a lot (40) of loquats (improved) from bed A to give a bud in louisiana

8/18/21
Fixed shade cloth that fell in laying yard
Fertilized asparagus
Hit loquats (improved), prunus nemaguard, bed E, pawpaws in bed A with Neem oil

8/19/21
Moved nursery to shade side, worried sprinkler was causing unnecessary moisture on leaves
Trimmed septoria off trees in nursery
Clipped growth skipping graft on apples
Finished stacking wood

Farm notes

September

DAY OF MONTH	MOON	SUN-RISE	SUNSET	SOLAR NOON TIME	SOLAR NOON ANGLE	DAY-LIGHT HOURS
1		6:37am	7:22pm	1:00pm	68°	12h45m
3		6:38am	7:20pm	12:59pm	67°	12h42m
10		6:42am	7:11pm	12:57pm	65°	12h29m
15		6:44am	7:05pm	12:55pm	63°	12h21m
17		6:45am	7:02pm	12:54pm	62°	12h17m
EQUINOX 22		6:48am	6:56am	12:52pm	60°	12h8m
25		6:50am	6:52pm	12:51pm	59°	12h3m
30		6:53am	6:46pm	12:50pm	57°	11h54m

All data specific to New Orleans, LA

TREE OF THE MONTH Chickasaw Plum, *Prunus angustifolia*

JUST FUCKING GOOGLE IT Mycofiltration

For the majority of September I was away from the farm supporting communities affected by Hurricane Ida. When I was able to check on things, I found the mushroom logs fruiting abundantly. Throughout the month, I was able to bring dozens of pounds of mushrooms into New Orleans and friends in the region where they were cooked at curfew BBQs during the blackout and for breakfast before long days tarping roofs and moving supplies.

Notes from a first year forest farm in SW Mississippi

9/4/21

Pile 1

none fruiting

Pile 2 (burlap)

primordia: some WR46
deformed/slimy: some WR46
full: WR46

} *Almost all on bottom row (some on 2nd)*

Pile 3

primordia: Night Velvet (bottom)
full: Night Velvet (inside), WR46 (bottom+top)

Pile 4

full: lots WR46, some Native Harvest

log has trich

Pile 4

Native on one, one WR46 log (oak) getting lit up by slugs
Lots of oysters in this pile (rotting now)

Farm notes

October

DAY OF MONTH	MOON	SUN-RISE	SUNSET	SOLAR NOON TIME	SOLAR NOON ANGLE	DAY-LIGHT HOURS
1		6:53am	6:45pm	12:49pm	57°	11h52m
2		6:54am	6:44pm	12:49pm	56°	11h50m
9		6:58am	6:36pm	12:47pm	54°	11h38m
15		7:02am	6:29pm	12:45pm	51°	11h27m
17		7:03am	6:27pm	12:45pm	51°	11h24m
25		7:09am	6:19pm	12:44pm	48°	11h10m
31		7:13am	6:14pm	12:43pm	46°	11h1m

All data specific to New Orleans, LA

OCTOBER 17, 2003

Following intense road blockades by Indigenous groups opposing the state's extractivist policies toward natural gas, the Bolivian Gas War of 2003 ended with celebration on the barricades and the resignation of the president of Bolivia and the flight of his government from La Paz.

TREE OF THE MONTH	Sea buckthorns, *Hippophae*
JUST FUCKING GOOGLE IT	Keeping a grocery store lobster as a pet

OCTOBER 14, 1897

Anti-colonial activist Elma Francois was born in Overland, Saint Vincent. She organized sugar workers, socialist and anti-war groups and was tried for sedition by the British.

Notes from a first year forest farm in SW Mississippi

10/17/21
Neemed all the nursery trees
Broadcast peas and oats up top terrace on north slope
Cleared trails
Took stock of 28-30 sweetgums to come down for inoculation
Burnt piles from yard and future pawpaw patch
Put hickories in soak

10/18/21
Buried reishi logs
Began clearing north of yard for something on that edge

Pecan?
Cypress?
Water hickory?
Chestnut?
Maybe something not productive since it's on that edge

10/19/21
Began clearing for mayhaw orchard

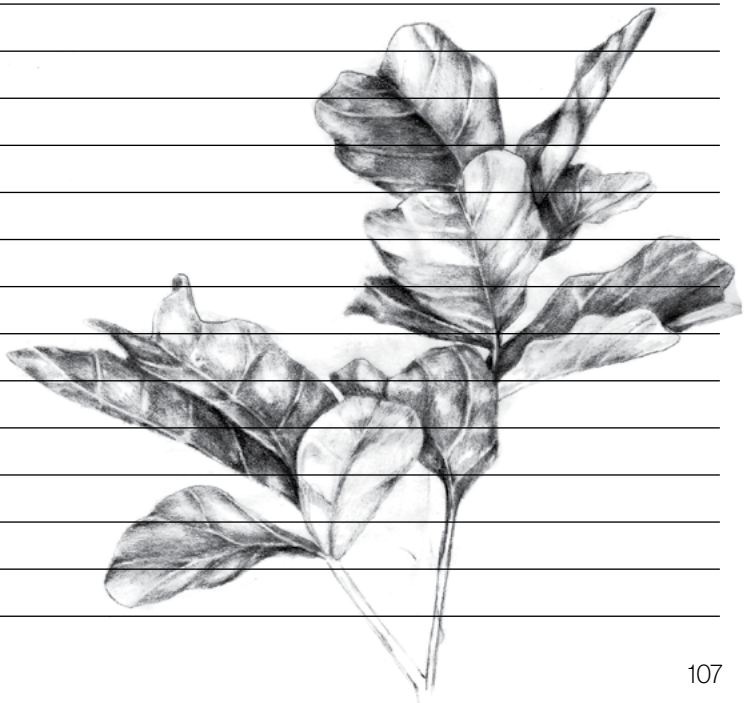
10/20/21
Continued clearing for orchard behind trailer
Put hickories into strat

10/21/21
Clipped + neemed prunus in bed F- leaves turning reddish purple, sometimes making rusty to dark red spots.

10/28/21
Cleaned trailer
Assessed locations for bath house

10/29/21
Cleared for mayhaw orchard

Farm notes



November

NOVEMBER 17, 1983

The Zapatista Army of National Liberation (EZLN) was founded by 6 Indigenous and mestizo people in the mountains of Chiapas, Mexico. In 2022, they defend an autonomous territory of approximately ten thousand square miles from encroachment by the Mexican state.

All data specific to New Orleans, LA

DAY OF MONTH	MOON	SUN-RISE	SUNSET	SOLAR NOON TIME	SOLAR NOON ANGLE	DAY-LIGHT HOURS
1		7:14am	6:13pm	12:43pm	45°	10h59m
8		6:19am	5:08pm	11:44am	43°	10h48m
15		6:25am	5:04pm	11:44am	41°	10h39m
16		6:26am	5:03pm	11:45am	41°	10h38m
23		6:31am	5:01pm	11:46am	40°	10h29m
30		6:37am	5:00pm	11:48am	38°	10h23m

American Indian Movement (AIM) activists evaded a U.S. Coast Guard blockade in order to occupy Alcatraz, an island in the San Francisco Bay which had been a federal prison from 1934 to 1963. The occupation included over 400 participants at its peak and lasted for 19 months.

TREE OF THE MONTH Bitternut Hickory, *Carya cordiformis*

JUST FUCKING GOOGLE IT Buffalo commons

NOVEMBER 20, 1969

NOVEMBER 7, 1841

On a slave ship called Creole on its way from Richmond, Virginia to New Orleans, nineteen of the enslaved people onboard staged a mutiny, killing one of the slave traders and sailing to the British colony of Nassau where slavery was outlawed. This is considered one of the most successful slave rebellions in U.S. history prior to the Civil War, ultimately leading to the freedom of 128 people onboard.

Notes from a first year forest farm in SW Mississippi

11/3/21
Harvest Hericium erinaceous off oak
Put sprinkler on in yard 10 mins in each location (many shiitake primordia, drying out)

11/4/21
Burnt all the pile @ future bathhouse
Picked yaupon

11/5/21
Spread swamp sunflower and rose mallow up on the orchard
Burnt pile on north slope
Harvested turkey tail, picked some Schizophyllum commune to look at it

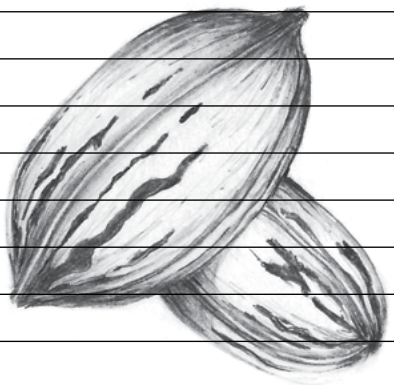
11/8/21
Harvested a bunch of shiitake

11/9/21
Tarped off blueberry planting
Setup A frame fruiting area in the yard
Harvested half basket

11/10/21
2022 rotation thoughts
6 stacks, 1 group extra spread across while not fruiting
(for 2022 bolts) 2 vacant, room for 2 more at entrance, move sandwiches to new home, place 1 stack where they were
Need space for reishi logs + consider other options for them
GROUP 1 is spread across stacks A, C, D, E, F
WW70 is on stack B

11/11/21
Finished organizing the yard
Measured blueberry plantings
Measured bathhouse
Finished tarping up and pine mulching blueberry sites

Farm notes



December

DAY OF MONTH	MOON	SUNRISE	SUNSET	SOLAR NOON TIME	SOLAR NOON ANGLE	DAY-LIGHT HOURS
1		6:38am	5:00pm	11:49am	38°	10h22m
7		6:43am	5:00pm	11:51am	37°	10h17m
15		6:48am	5:02pm	11:55am	37°	10h14m
16		6:49am	5:02pm	11:55am	37°	10h14m
SOLSTICE 21		6:51am	5:05am	11:55am	37°	10h13m
23		6:52am	5:06pm	11:59am	37°	10h13m
29		6:55am	5:09pm	11:59am	37°	10h14m
31		6:55am	5:11pm	11:59am	37°	10h15m

All data specific to New Orleans, LA

TREE OF THE MONTH	Candleberry, *Triadica sebifera*
JUST FUCKING GOOGLE IT	Yaupon holly

DECEMBER 23, 1868

The Ogeechee Insurrection began in coastal Georgia as people formerly enslaved on rice plantations drove the planters and their supporters away and occupied the Ogeechee Neck. Over the next two weeks, within a limited territory, the infrastructural and symbolic power of the planter class was destroyed, and the insurgents set out to live a new life.

12/5/21
Past week I been clearing the areas east of the laying yard and the deep north of mayhaw orchard + laying yard

12/8/21
Got back, cleaned up the vines going up the oaks along the driveway
Didn't go to get blueberry plants yesterday or today, maybe friday? (Going to put them along the Hericium expansion)

12/9/21
Picked some yaupon with friends
Finished clearing behind the yard

12/10/21
Went and got 21 rabbiteye blueberries (7x Tifblue, 7x Climax, 7x Brightwell)
Began yaupon management experiment

12/11/21
Finished pruning and picking yaupon
Gamed out Muscadine trellis tunnel in the yard east

12/23/21
Harvested 42.64 lbs of shiitakes

12/29/21
Preparing blueberry line for edge of yard expansion

Notes from a first year forest farm in SW Mississippi

12/29/21 cont'd
Mixing in some loquat for evergreen shade
Putting elderberry for temp shade, could be removed or shaded out in a few years, for now could provide space for sandwiches
Put down tarps for blueberry+mayhaw

12/30/21
Planted 7 loquat (improved), 3 pawpaw (oikos)
Planted 6 blueberries on little mounds, mulched with pine straw from laying yard, 50 ft away
Placed the remnants of privet stumps removed for the blueberry plantings on top of the pine straw as an offering of mycorrhizal fungi to the new plants
I returned to check on the planting after dark to find the stumps glowing. The privet was brimming with mycelium of bioluminescent fungi. Armillaria.

Monthly illustrations by
Elise Kauffmann
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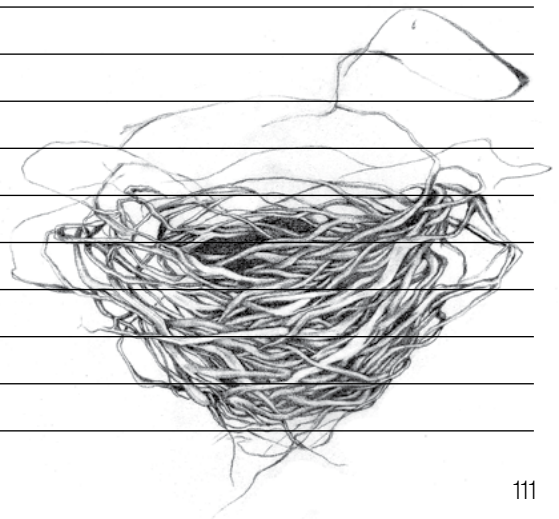
Farm notes



Chestnut Variety & Species Chart

wiki.buildsoil.net

Please note that this is a living document and is subject to change. This list is the product of our first try rummaging through catalogs and records, and we are not 100% sure that this is accurate in terms of pollination/no pollination. It's also important to note that two trees with different pollination times will miss each other, although there is not a lot of good information available on that.

Pollinators

Cultivar or Variety	Species	Blight Resistance	Pollen Producing	Flowering Month
Alachua	*Castanea dentata x mollissima (Dunstan)*	Yes	Yes	
American	*Castanea dentata*	No	Yes	
Belle Epine	*Castanea sativa*	Yes	Yes	
Bergantz	*Castanea crenata x sativa*	Unknown	Yes	
Big Euro	*Castanea mollissima x sativa*	Unknown	Yes	
Bisalta #3	*Castanea crenata x sativa*	Yes	Yes	June
Carolina	*Castanea mollissima x dentata hybrid (R.T. Dunstan)*	Yes	Yes	
Carpenter	*Castanea mollissima x dentata hybrid (R.T. Dunstan)*	Yes	Yes	
Chinese	*Castanea mollissima*	Yes	Yes	June
Chinese x European	*Castanea mollissima x sativa*	Yes	Yes	
Collosal Pollinator	*Castanea crenata x mollissima x sativa*	Yes	Yes	
European	*Castanea sativa*	No	Yes	
Maraval (#74)	*Castanea crenata x sativa (INRA)*	Yes	Yes	
Marigoule (#15)	*Castanea crenata x sativa (INRA)*	Yes	Yes	
Marrone di Marradi	*Castanea sativa*	No	Yes	
Marsol (Maraval 07)	*Castanea crenata x sativa (INRA)*	Yes	Yes	
Myoka	*Castanea mollissima*	Yes	Yes	
Nevada	*Castanea crenata x sativa*	Yes	Yes	
Okei (UCD 6-10, Big O, U.C. Pollinizer #1)	*Silverleaf open pollinated (crenata x chinquapin hybrid) (K. Ryugo)*	Unknown	Yes	

Orrin	*Castanea mollissima (Orrin S. Good)*	Yes	Yes	
Paragon (Great Dentata, Great American, Sobers Paragon)	*Castanea sativa x dentata*	No	Yes	
Précoce Migoule	*Castanea crenata x sativa (INRA)*	Yes	Yes	
Primato	*Tsukuba open pollinated (Castanea crenata)*	Yes	Yes	
Prolific (Early Prolific)	*Castanea crenata*	No	Yes	
Regina Montis	*Castanea crenata x sativa*	Unknown	Yes	
Regis Montis	*Castanea sativa (European)*	Unknown	Yes	
Schlarbaum	*Castanea mollissima x sativa*	Unknown	Yes	
Silverleaf (Eurobella)	*Castanea crenata x chinquapin hybrid (Doyle Judd)*	No	Yes	
Silverleaf Pollenizer	*?*	Unknown	Yes	
Skioka (Gelllatly #2)	*Castanea mollissima seedling, open pollinated (J.U. Gellatly)*	Yes	Yes	
Sweet Hart	*Castanea dentata x mollissima*	Yes	Yes	
Szego	*Castanea mollissima x sativa hybrid*	Yes	Yes	
Timber Hybrid	*?*	Unknown	Yes	
Torakuri	*Castanea crenata x sativa*	Unknown	Yes	
Tsukuba	*Castanea crenata*	Yes	Yes	
Wildlife Hybrid	*Castanea mollissima x pumila x seguinii*	Unknown	Yes	

Pollen Sterile

Cultivar or Variety	Species	Blight Resistance	Pollen Producing	Flowering Month
Auburn Homestead/ AU Homestead	*Castanea dentata x mollissima (Dunstan)*	Yes	Yes	
Bisalta #2	*Castanea dentata*	No	Yes	
Bouche de Betizac	*Castanea sativa*	Yes	Yes	
Bracalla	*Castanea crenata x sativa*	Unknown	Yes	
Colossal	*Castanea mollissima x sativa*	Unknown	Yes	
Eaton	*Castanea crenata x sativa*	Yes	Yes	June
Fowler (UCD 92-359-1)	*Castanea mollissima x dentata hybrid (R.T. Dunstan)*	Yes	Yes	
Grimo 142Q	*Castanea mollissima x dentata hybrid (R.T. Dunstan)*	Yes	Yes	
Layeroka (Gellatly #1)	*Castanea mollissima*	Yes	Yes	June
Luvall's Monster	*Castanea mollissima x sativa*	Yes	Yes	
Marrisard (#122)	*Castanea crenata x mollissima x sativa*	Yes	Yes	
Marron du Var (Marron du Luc, de Collo briéres)	*Castanea sativa*	No	Yes	
Marrone Comballe (Comballe	*Castanea crenata x sativa (INRA)*	Yes	Yes	
Marrone di Chiusa Pesio (Marrone di Chuse Pesio)	*Castanea crenata x sativa (INRA)*	Yes	Yes	
Marrone di Susa (Marrone di Val di Susa)	*Castanea sativa*	No	Yes	
Skookum	*Castanea crenata x sativa (INRA)*	Yes	Yes	
Tanzawa	*Castanea mollissima*	Yes	Yes	
TO 613	*Castanea crenata x sativa*	Yes	Yes	
Whitten South	*Silverleaf open pollinated (crenata x chinquapin hybrid) (K. Ryugo)*	Unknown	Yes	
Willamette	*Castanea mollissima (Orrin S. Good)*	Yes	Yes	

A List of Perennial Vegetables

Note that this is a global inventory of perennial vegetables. Some of these species are, or could become, serious weeds outside of their native range. We present this list to provide a jumping off point for those looking to learn more of the possibilities of a perennial agriculture. For much more down this rabbit hole, check out Edible Forest Gardens vol. 1 & 2 by Dave Jacke with Eric Toensmeier.

EXTREME COLD (USDA Zones 1-3)

nodding wild onion (Allium cernuum), showy & common milkweed (Asclepias syriaca, A. speciosa), red valerian (Centranthus ruber), Maximilan sunflower (Helianthus maximiliani), sunchoke (Helianthus tuberosus), duckweed (Lemna spp.), ostrich fern (Matteuccia struthiopteris), watercress (Nasturtium officinale), mountain sorrel (Oxyria digyna), yampah (Perideridia gairdnerii), rhubarb (Rheum x cultorum), arrowhead (Sagittaria latifolia), cattail (Typha spp.), water meal (Wolffia spp.)

COLD TEMPERATE (USDA Zones 4-7)

perennial leek (Allium ampeloprasum), multiplier onion (Allium cepa aggregatum), walking onion (Allium cepa proliferum), nodding wild onion (Allium cernuum), Welsh onion (Allium fistulosum), ramps (Allium tricoccum), garlic chives (Allium tuberosum), groundnut (Apios americana), udo (Aralia cordata), river cane (Arundinaria gigantea), showy & common milkweed (Asclepias syriaca, A. speciosa), asparagus (Asparagus officinalis), yellow asphodel (Asphodeline lutea), sea beet (Beta vulgaris maritima), Turkish rocket (Bunias orientalis), camass (Camassia spp.), fragrant spring tree (Cedrella sinensis), red valerian (Centranthus ruber), good King Henry (Chenopodium bonus-henricus), chicory (Cichorium intybus), colewort (Crambe cordifolia), sea kale (Crambe maritima), jinenjo (Dioscorea japonica), Chinese yam (Dioscorea opposita), sylvetta arugula (Diplotaxis muralis, D. tenuifolia), Caucasian spinach (Hablitzia tamnoides), Maximilan sunflower (Helianthus maximiliani), sunchoke (Helianthus tuberosus), daylily (Hemerocallis spp.), wood nettle (Laportaea canadensis), duckweed (Lemna spp.), lovage (Levisticum officinale), biscuit root (Lomatium spp.), leaf goji (Lycium chinense), gumbo leaf mallow (Malva moschata), ostrich fern (Matteuccia struthiopteris), mulberry (Morus alba), watercress (Nasturtium officinale), American lotus (Nelumbo lutea), Chinese lotus (Nelumbo nucifera), water celery (Oenanthe javanica), mountain sorrel (Oxyria digyna), yampah (Perideridia gairdnerii), fuki (Petasites japonicus), running bamboo (Phyllostachys spp.), clammy ground cherry (Physalis heterophylla), longleaf groundcherry (Physalis longifolia), ground cherry (Physalis pruinosa), pokeweed (Phytolacca americana), giant Solomon's seal (Polygonatum commutatum), Himalayan rhubarb (Rheum australe), turkey rhubarb (Rheum palmatum), rhubarb (Rheum x cultorum), staghorn sumac (Rhus typhina), French sorrel (Rumex acetosa), sheep sorrel (Rumex acetosella), buckler-leaf sorrel (Rumex scutatus), arrowhead (Sagittaria latifolia), running bamboo (Sasa kurilensis), scorzonera (Scorzonera hispanica), running bamboo (Semiarundinaria fastuosa), skirret (Sium sisarum), Chinese artichoke, crosnes (Stachys sieboldii), dandelion (Taraxacum officinale), New Zealand spinach (Tetragonia tetragonioides), linden, lime, basswood (Tilia spp.), cattail (Typha spp.), stinging nettle (Urtica dioica), water meal (Wolffia spp.)

COOL MARITIME (USDA Zones 8-9)

perennial leek (Allium ampeloprasum), multiplier onion (Allium cepa aggregatum), walking onion (Allium cepa proliferum), nodding wild onion (Allium cernuum), Welsh onion (Allium fistulosum), garlic chives (Allium tuberosum), ramsons (Allium ursinum), groundnut (Apios americana), wild celery (Apium prostratum filiforme), udo (Aralia cordata), asparagus (Asparagus officinalis), yellow asphodel (Asphodeline lutea), saltbush (Atriplex halimus), water parsnip (Berula erecta), sea beet (Beta vulgaris maritima), "Western Front" kale (Brassica napus), wild cabbage (Brassica oleracea), "Colocha" (Brassica oleracea), "Tree Collards" (Brassica oleracea acephala), Gai Lon (Brassica oleracea alboglabra), "9 Star" perennial broccoli (Brassica oleracea botrytis), branching bush kales, "Dorbentons" kale (Brassica oleracea ramosa), Turkish rocket (Bunias orientalis), camass (Camassia

spp.), achira, edible canna (Canna edulis), fragrant spring tree (Cedrella sinensis), red valerian (Centranthus ruber), good King Henry (Chenopodium bonus-henricus), chicory (Cichorium intybus), taro (Colocasia esculenta), colewort (Crambe cordifolia), sea kale (Crambe maritima), cardoon (Cynara cardunculus), globe artichoke (Cynara scolymus), Chinese yam (Dioscorea opposita), sylvetta arugula (Diplotaxis muralis, D. tenuifolia), Caucasian spinach (Hablitzia tamnoides), Maximilan sunflower (Helianthus maximiliani), sunchoke (Helianthus tuberosus), daylily (Hemerocallis spp.), wood nettle (Laportaea canadensis), lovage (Levisticum officinale), biscuit root (Lomatium spp.), leaf goji (Lycium chinense), gumbo leaf mallow (Malva moschata), bush banana, Austral doubah (Marsdenia australis), ostrich fern (Matteuccia struthiopteris), mulberry (Morus alba), watercress (Nasturtium officinale), American lotus (Nelumbo lutea), Chinese lotus (Nelumbo nucifera), water celery (Oenanthe javanica), nopale cactus, tuna (Opuntia ficus-indica, O. robusta, O. streptacantha), oca (Oxalis tuberosa), mountain sorrel (Oxyria digyna), yampah (Perideridia gairdnerii), fuki (Petasites japonicus), runner bean (Phaseolus coccineus), lima bean (Phaseolus lunatus), running bamboo (Phyllostachys spp.), goldenberry (Physalis peruviana), pokeweed (Phytolacca americana), root beer leaf, hoja santa (Piper auritum), giant Solomon's seal (Polygonatum commutatum), Himalayan rhubarb (Rheum australe), turkey rhubarb (Rheum palmatum), rhubarb (Rheum x cultorum), staghorn sumac (Rhus typhina), French sorrel (Rumex acetosa), sheep sorrel (Rumex acetosella), buckler-leaf sorrel (Rumex scutatus), arrowhead (Sagittaria latifolia), Chinese arrowhead (Sagittaria sinensis), running bamboo (Sasa kurilensis), scorzonera (Scorzonera hispanica), running bamboo (Semiarundinaria fastuosa), skirret (Sium sisarum), yacon (Smallianthus sonchifolia), potato (Solanum tuberosum), Chinese artichoke, crosnes (Stachys sieboldii), dandelion (Taraxacum officinale), New Zealand spinach (Tetragonia tetragonioides), linden, lime, basswood (Tilia spp.), "Ken Aslett" mashua (Tropaeolum tuberosum), cattail (Typha spp.), stinging nettle (Urtica dioica), izote (Yucca guatemalensis)

HOT AND HUMID (USDA Zones 8-9)

perennial leek (Allium ampeloprasum), multiplier onion (Allium cepa aggregatum), walking onion (Allium cepa proliferum), nodding wild onion (Allium cernuum), Welsh onion (Allium fistulosum), garlic chives (Allium tuberosum), groundnut (Apios americana), river cane (Arundinaria gigantea), showy & common milkweed (Asclepias syriaca, A. speciosa), asparagus (Asparagus officinalis), Turkish rocket (Bunias orientalis), achira, edible canna (Canna edulis), fragrant spring tree (Cedrella sinensis), taro (Colocasia esculenta), colewort (Crambe cordifolia), globe artichoke (Cynara scolymus), air potato (Dioscorea bulbifera), Chinese yam (Dioscorea opposita), sylvetta arugula (Diplotaxis muralis, D. tenuifolia), sunchoke (Helianthus tuberosus), daylily (Hemerocallis spp.), arrowroot (Maranta arundinacea), moringa (Moringa oleifera), African moringa (Moringa stenopetala), mulberry (Morus alba), watercress (Nasturtium officinale), American lotus (Nelumbo lutea), Chinese lotus (Nelumbo nucifera), nopale cactus, tuna (Opuntia ficus-indica, O. robusta, O. streptacantha), lima bean (Phaseolus lunatus), goldenberry (Physalis peruviana), pokeweed (Phytolacca americana), root beer leaf, hoja santa (Piper auritum), "Day Neutral" winged bean (Psophocarpus tetragonobolus), arrowhead (Sagittaria latifolia), Chinese arrowhead (Sagittaria sinensis), chayote (Sechium edule), yacon (Smallianthus sonchifolia), cattail (Typha spp.), stinging nettle (Urtica dioica)

ARID AND HOT (USDA Zones 8-10)

edible seed acacias (Acacia holosericea, A. murrayana, A victoriae), hardy agaves (Agave parreyi, A. chrysantha, A. deserti, A. utahensis, A. palmeri), tropical agaves (Agave salmiana, A. tequilana), garlic chives (Allium tuberosum), pigeon pea (Cajanus cajan), palo verde (Cercidium microphyllum), chaya (Cnidoscolus chayamansa), bull nettle (Cnidoscolus palmeri), cholla (Cylindropuntia acanthocarpa), gamote (Cymopteris spp.), moringa (Moringa oleifera), African moringa (Moringa stenopetala), mulberry (Morus alba), nopale cactus, tuna (Opuntia ficus-indica, O. robusta, O. streptacantha), runner bean (Phaseolus coccineus), lima bean (Phaseolus lunatus), cache bean (Phaseolus polysanthus), Livingstone potato (Plectranthus esculentus), marama bean (Tylosema esculentum), izote (Yucca guatemalensis),

MILD MEDITERRANEAN (USDA Zones 8-10)

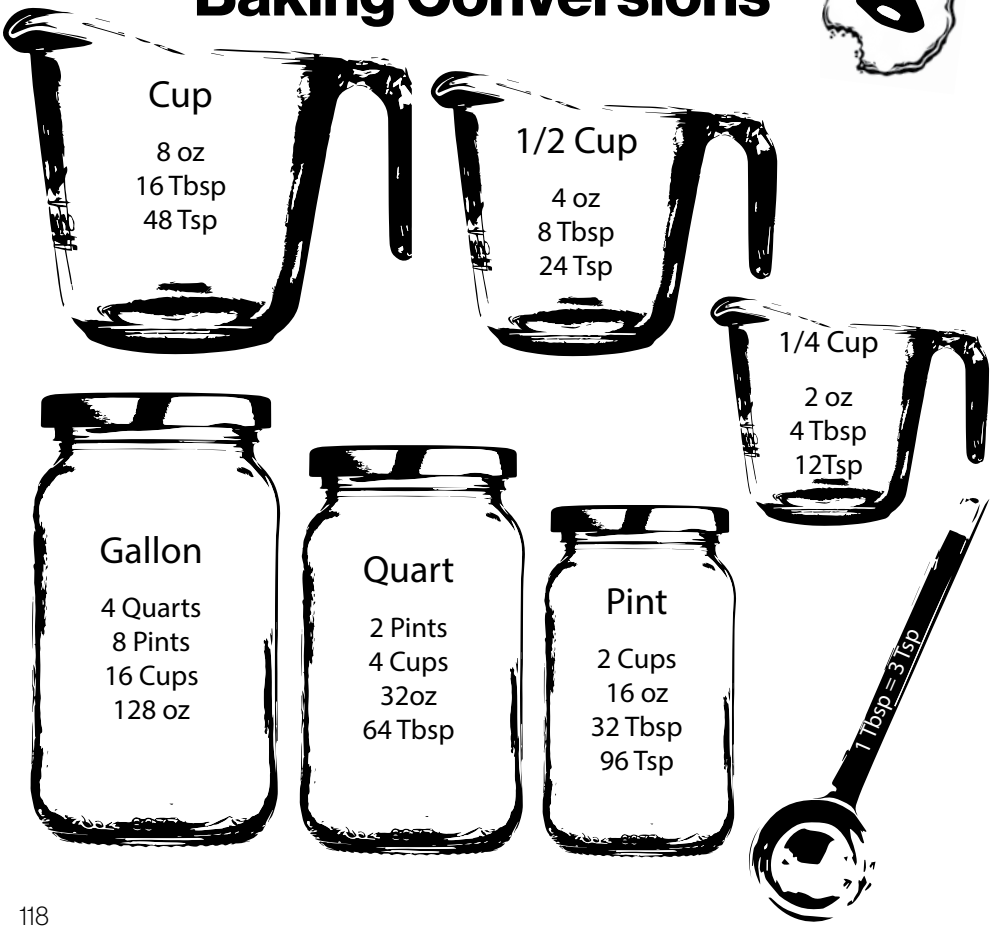
perennial okra (Abelmoschus esculentus), edible seed acacias (Acacia holosericea, A. murrayana, A victoriae), hardy agaves (Agave parreyi, A. chrysantha, A. deserti, A. utahensis, A. palmeri), tropical agaves (Agave salmiana, A. tequilana), perennial leek (Allium ampeloprasum), multiplier onion (Allium cepa aggregatum), walking onion (Allium cepa proliferum), Welsh onion (Allium fistulosum), garlic chives (Allium tuberosum), wild celery (Apium prostratum filiforme), water hawthorn (Aponogeton distachios), udo (Aralia cordata), asparagus (Asparagus officinalis), yellow asphodel (Asphodeline lutea), saltbush (Atriplex halimus), water parsnip (Berula erecta), sea beet (Beta vulgaris maritima), "Western Front" kale (Brassica napus), wild cabbage (Brassica oleracea), "Colocha" (Brassica oleracea), "Tree Collards" (Brassica oleracea acephala), Gai Lon (Brassica oleracea alboglabra), "9 Star" perennial broccoli (Brassica oleracea botrytis), branching bush kales, "Dorbentons" kale (Brassica oleracea ramosa), Turkish rocket (Bunias orientalis), camass (Camassia spp.), achira, edible canna (Canna edulis), babac (Carica pentaloba), fragrant spring tree (Cedrella sinensis), red valerian (Centranthus ruber), good King Henry (Chenopodium bonus-henricus), chicory (Cichorium intybus), chaya (Cnidoscolus chayamansa), taro (Colocasia esculenta), colewort (Crambe cordifolia), sea kale (Crambe maritima), chipilin (Crotolaria longirostrata), figleaf gourd, chilacayote (Cucurbita ficifolia), cholla (Cylindropuntia acanthocarpa), cardoon (Cynara cardunculus), globe artichoke (Cynara scolymus), chufa (Cyperus esculentus sativus), jinenjo (Dioscorea japonica), Chinese yam(Dioscorea opposita), cush cush yam (Dioscorea trifida), sylvetta arugula (Diplotaxis muralis, D. tenuifolia), lablab bean (Dolichos lablab), water chestnut (Eleocharis dulcis), enset (Ensete ventricosum), Caucasian spinach (Hablitzia tamnoides), Maximilan sunflower (Helianthus maximiliani), sunchoke (Helianthus tuberosus), daylily (Hemerocallis spp.), cranberry hibiscus (Hibiscus acetosella), sweet potato, boniato (Ipomoea batatas), lovage (Levisticum officinale), leaf goji (Lycium chinense), gumbo leaf mallow (Malva moschata), bush banana, Austral doubah (Marsdenia australis), moringa (Moringa oleifera), African moringa (Moringa stenopetala), mulberry (Morus alba), watercress (Nasturtium officinale), American lotus (Nelumbo lutea), Chinese lotus (Nelumbo nucifera), water celery (Oenanthe javanica), nopale cactus, tuna (Opuntia ficus-indica, O. robusta, O. streptacantha), oca (Oxalis tuberosa), mountain sorrel (Oxyria digyna), yampah (Perideridia gairdnerii), fuki (Petasites japonicus), runner bean (Phaseolus coccineus), lima bean (Phaseolus lunatus), cache bean (Phaseolus polysanthus), running bamboo (Phyllostachys spp.), goldenberry (Physalis peruviana), ground cherry (Physalis pruinosa), root beer leaf, hoja santa (Piper auritum), Livingstone potato (Plectranthus esculentus), "Day Neutral" winged bean (Psophocarpus tetragonobolus), Himalayan rhubarb (Rheum australe), turkey rhubarb (Rheum palmatum), rhubarb (Rheum x cultorum), French sorrel (Rumex acetosa), sheep sorrel (Rumex acetosella), buckler-leaf sorrel (Rumex scutatus), scorzonera (Scorzonera hispanica), skirret (Sium sisarum), yacon (Smallianthus sonchifolia), pepino melon (Solanum muricatum), potato (Solanum tuberosum), hausa potato (Solonostemon rotundifolius), Chinese artichoke, crosnes (Stachys sieboldii), dandelion (Taraxacum officinale), New Zealand spinach (Tetragonia tetragonioides), linden, lime, basswood (Tilia spp.), "Ken Aslett" mashua (Tropaeolum tuberosum), mashua (Tropaeolum tuberosum), cattail (Typha spp.), ulluco (Ullucus tuberosus), stinging nettle (Urtica dioica), izote (Yucca guatemalensis),

LOWLAND MONSOON AND HUMID TROPICS (USDA Zones 10-12)

perennial okra (Abelmoschus esculentus), edible hibiscus (Abelmoschus manihot), baobab (Adansonia digitata), tropical agaves (Agave salmiana, A. tequilana), Welsh onion (Allium fistulosum), garlic chives (Allium tuberosum), giant taro (Alocasia macrhorrhizos), sissoo spinach (Alternanthera sissoo), water hawthorn (Aponogeton distachios), water yam (Aponogeton madagascarensis), breadfruit (Artocarpus altilis), jakfruit (Artocarpus heterophylla), clumping bamboo(Bambusa spp.), Malabar spinach (Basella alba), pigeon pea (Cajanus cajan), achira, edible canna (Canna edulis), papaya (Carica papaya), water hornfern (Ceratopteris thalyctroides), tepijelote (Chamaedora tepijelote), chaya (Cnidoscolus chayamansa), bull nettle (Cnidoscolus palmeri), spurge nettle (Cnidoscolus stimulosus), ivy gourd, perennial cucumber (Coccinia grandis), taro (Colocasia esculenta), cholla (Cylindropuntia acanthocarpa), clumping bamboo (Dendrocalamus spp.), white yam (Dioscorea alata), air potato (Dioscorea bulbifera), Asiatic lesser yam (Dioscorea esculenta), cush cush yam (Dioscorea trifida),

lablab bean (Dolichos lablab), water chestnut (Eleocharis dulcis), gorgon plant (Euryale ferox), clumping bamboo (Gigantochloa spp.), African jointfir (Gnetum africanum), jointfir (Gnetum gnemon), Okinawa spinach (Gynura crepioides), cranberry hibiscus (Hibiscus acetosella), water spinach (Ipomoea aquatica), sweet potato, boniato (Ipomoea batatas), duckweed (Lemna spp.), guaje (Leucaena esculenta), cassava, yuca, manioc (Manihot esculenta), arrowroot (Maranta arundinacea), bitter gourd (Momordica charantica), moringa (Moringa oleifera), African moringa (Moringa stenopetala), mulberry (Morus alba), banana, plantain (Musa x paradisica), watercress (Nasturtium officinale), clumping bamboo (Nastus elatus), Chinese lotus (Nelumbo nucifera), nopale cactus, tuna (Opuntia ficus-indica, O. robusta, O. streptacantha), lima bean (Phaseolus lunatus), root beer leaf, hoja santa (Piper auritum), Livingstone potato (Plectranthus esculentus), "Day Neutral" winged bean (Psophocarpus tetragonobolus), winged bean (Psophocarpus tetragonobolus), Chinese arrowhead (Sagittaria sinensis), katuk (Sauropus androgynous), chayote (Sechium edule), hummingbird tree (Sesbania grandiflora), highlands pitpit (Setaria palmifolia), eggplant (Solanum melongena), hausa potato (Solonostemon rotundifolius) African yambean (Sphenostylis stenocarpa), fluted gourd (Telfairia occidentalis), Haitian basket vine (Trichostigma octandrum), Australian arrowgrass (Triglochin spp.), water meal (Wolffia spp.), belembe/taioba (Xanthosoma brasiliense), cocoyam (Xanthosoma saggitifolium), violet-stem taro (Xanthosoma violaceum), izote (Yucca guatemalensis),

Baking Conversions



CONVERSIONS

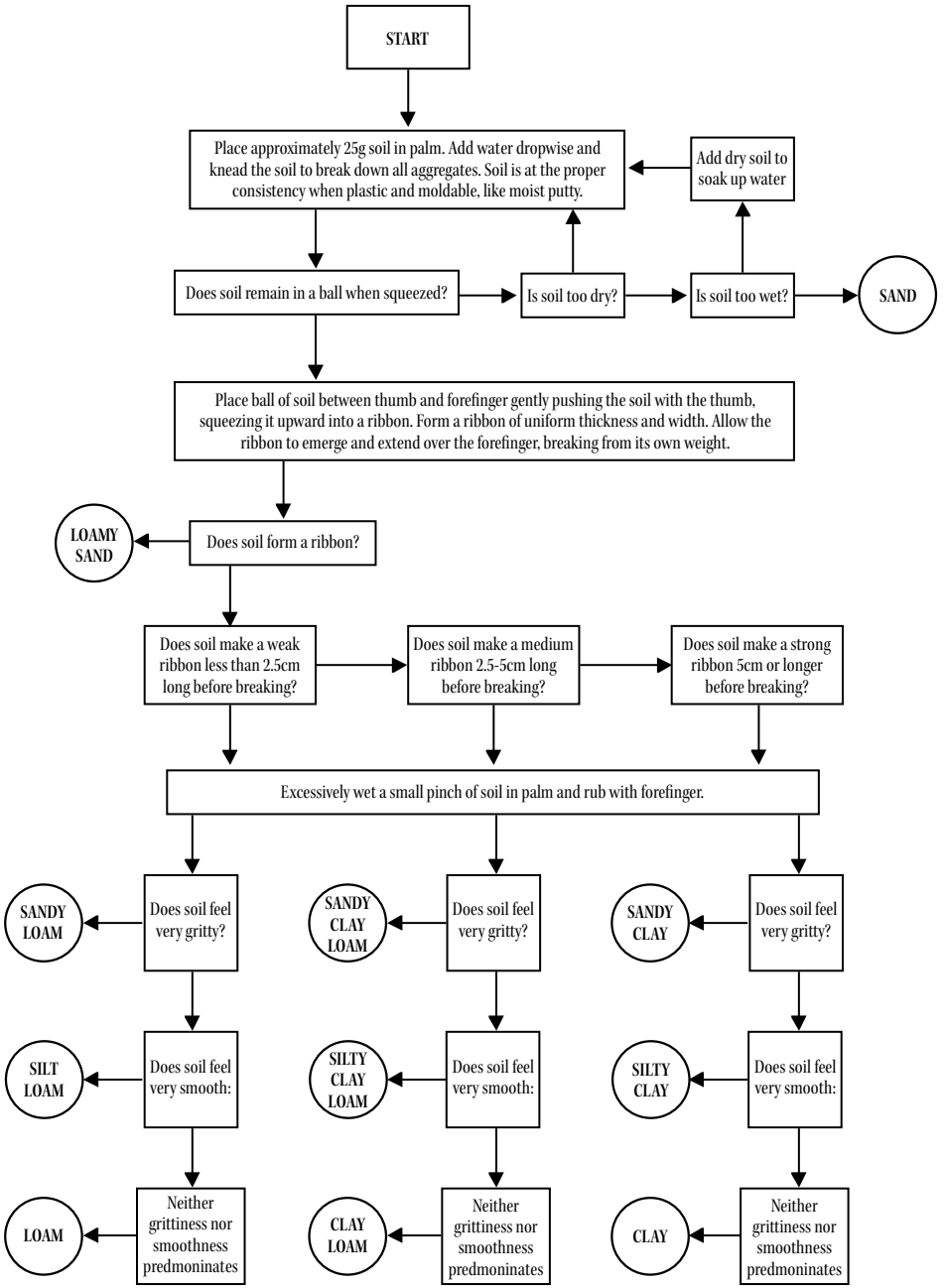
Temperature

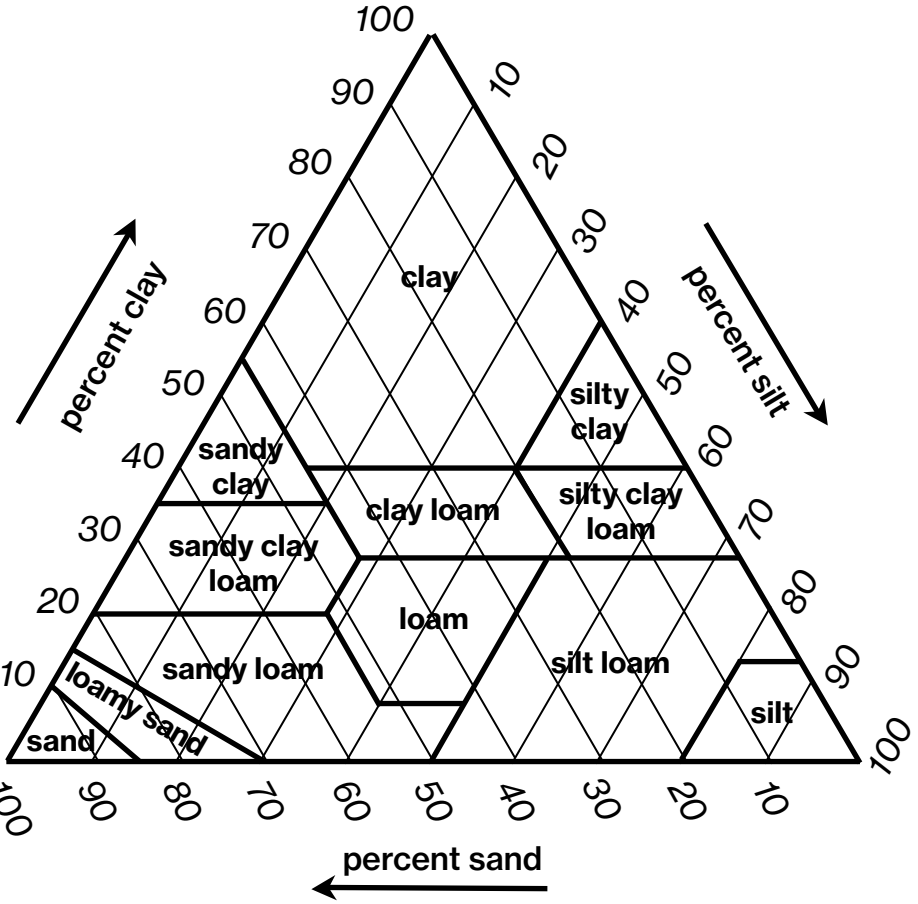
°C = (°F-32) x .556
°F = °C(1.8) + 32

Convert...
Inch to mm Multiply by 25.4
mm to Inch Multiply by .03937
Feet to Inch Multiply by .3048
Meters to Feet Multiply by 3.281
Yards to Meters Multiply by .9144
Meters to Yards Multiply by 1.094
Miles to km Multiply by 1.609
km to Miles Multiply by .6214

To Change	To	Multiply By
Inches	Feet	.0833
Inches	Millimeters	25.4
Feet	Inches	12
Feet	Yards	.3333
Yards	Feet	3
Square Inches	Square Feet	.00694
Square Feet	Square Inches	144
Square Feet	Square Yards	.11111
Square Yards	Square Feet	9
Cubic Inches	Cubic Feet	.00058
Cubic Feet	Cubic Inches	1728
Cubic Feet	Cubic Yards	.03703
Cubic Yards	Cubic Feet	27
Cubic Inches	Gallons	.00433
Cubic Feet	Gallons	7.48
Gallons	Cubic Inches	231
Gallons	Cubic Feet	.1337
Gallons	Lbs of Water	8.33
Lbs of Water	Gallons	.12004
Ounces	Pounds	.0625
Pounds	Ounces	16
Inches of Water	Lbs/Square Inch	.0361

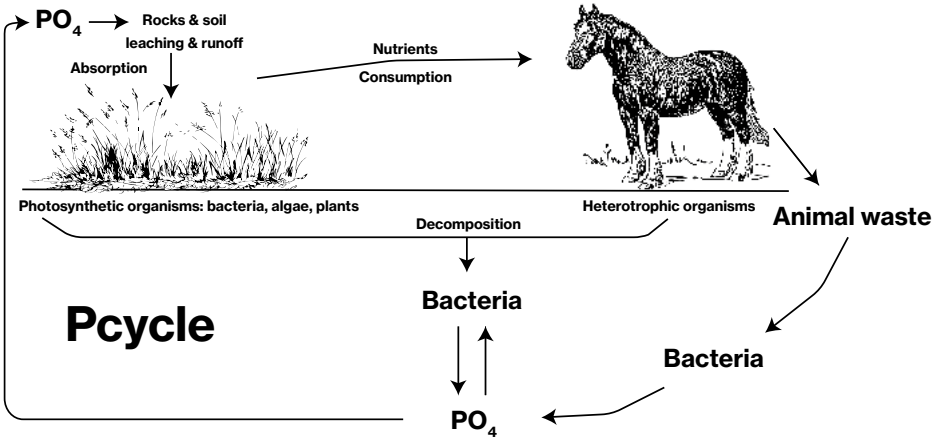
Home Test for Soil Type




100
90
80
70
60
50
40
30
20
10
percent clay
clay
silty clay
sandy clay
clay loam
silty clay loam
sandy clay loam
loam
silt loam
sandy loam
loamy sand
sand
silt
percent silt
percent sand

Essential Plant Nutrients

Nutrient	Ions Absorbed by Plants
Structural elements	
Carbon, C	CO_2
Hydrogen, H	H_2O
Oxygen, O	O_2
Primary nutrients	
Nitrogen, N	NO_3^-, NH_4^+
Phosphorus, P	$H_2PO_4^-$,HPO_4^{-2}
Potassium, K	K^+
Secondary nutrients	
Calcium, Ca	Ca^{+2}
Magnesium, Mg	Mg^{+2}
Sulfur, S	SO_4^{-2}
Micronutrients	
Boron, B	$H_2BO_3^-$
Chlorine, Cl	Cl^-
Cobalt, Co	Co^{+2}
Copper, Cu	Cu^{+2}
Iron, Fe	Fe^{+2}, Fe^{+3}
Manganese, Mn	Mn^{+2}
Molybdenum, Mo	MoO_4^{-2}
Zinc, Zn	Zn^{+2}



Pcycle

Typical nutrient content, moisture content, and weight of manure

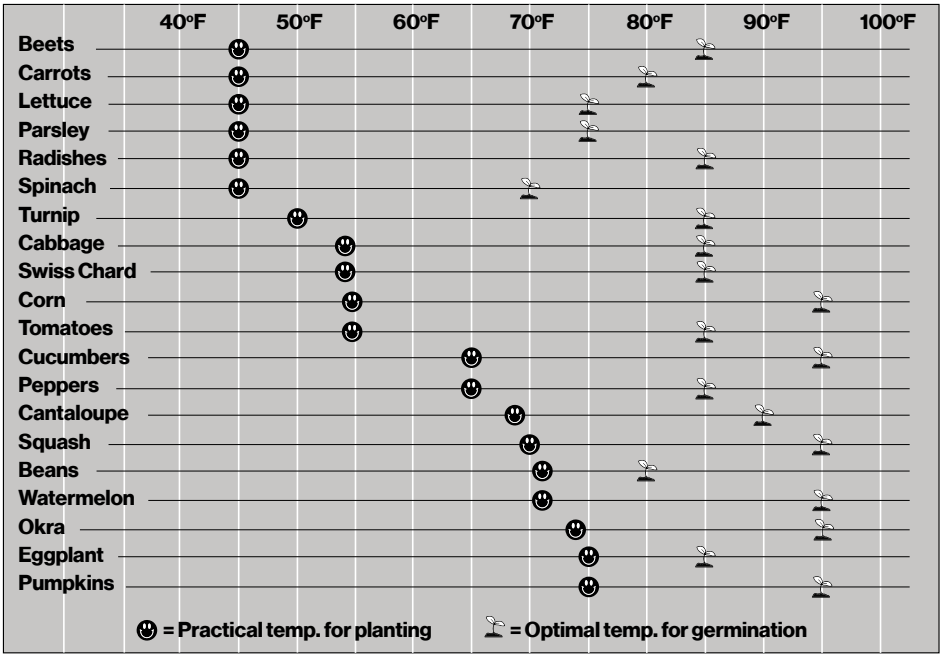
Type of Animal Manure	N	P[2]	K	Moisture, percent	Weight, lb/cu yard
	lb per ton as is [1,2]				
Chicken with litter	73	28	55	30	900
Laying hen	37	25	39	60	1,400
Sheep	18	4.0	29	72	1,400
Rabbit	15	4.2	12	75	1,400
Beef	12	2.6	14	77	1,400
Horse	9	2.6	13	63	1,400
Dry stack dairy	9	1.8	16	65	1,400
Separated dairy soilds[3]	5	0.9	2.4	81	1,100

[1] Manure analyses are usually reported in terms of P and K, while fertilizer labels are phosphate (P_2O_5) and potash (K_2O). To convert from P to P_2O_5, multiply P by 2.3. To convert from K to K_2O, multply K by 1.2.

[2] These values assume that manure has been protected from rain.

[3] Separated dairy solids are produced when dairy manure is pumped over a screen, separating the soilds from the rest of the manure.

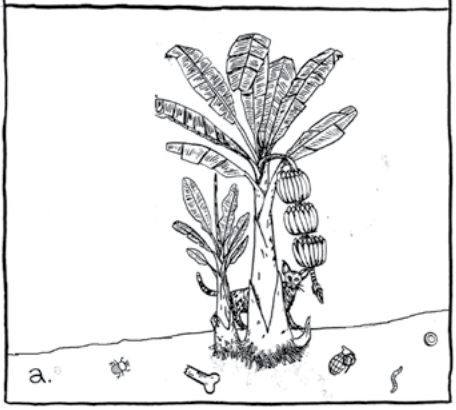
Soil Temperatures for Germination

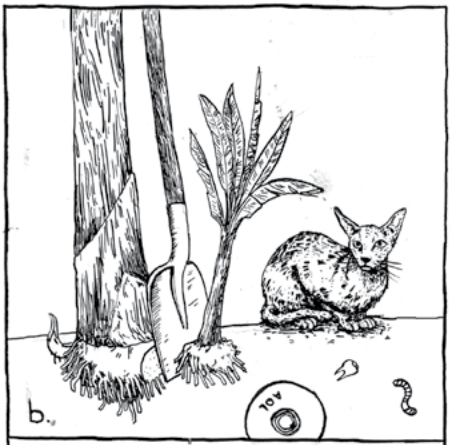


DESTITUTE DOLE

BANANA PROPAGATION

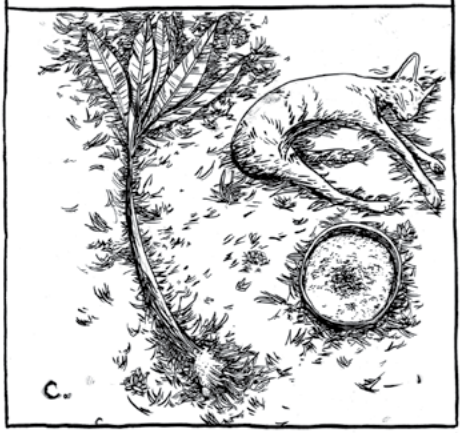
Cloning a banana plant is less of an operation then it sounds like. The banana is busy cloning itself anyway - left to its devices, one plant will form a circular clump, spreading year after year.





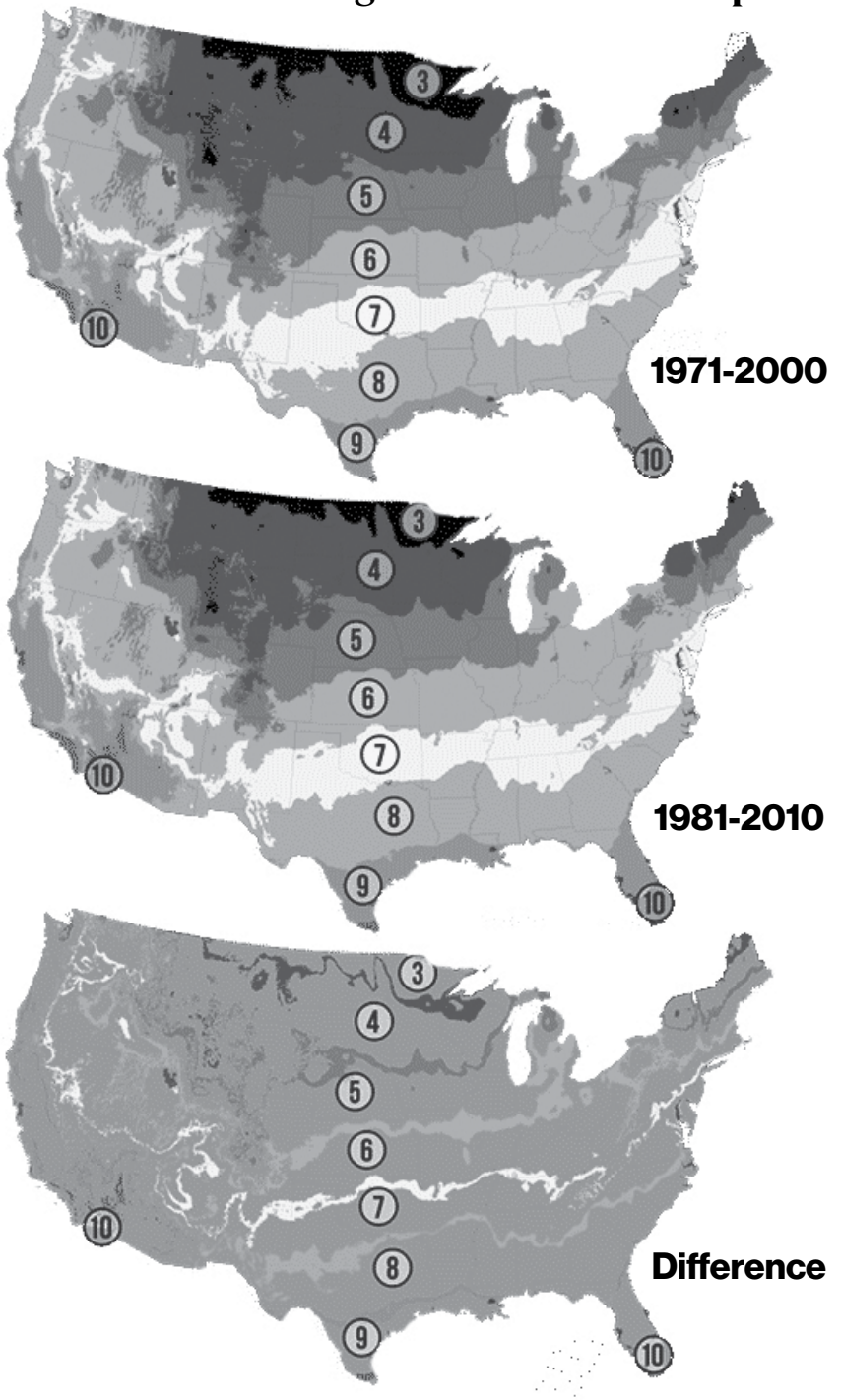
Baby bananas are called pups. A sharp shovel is used to seperate them from the larger clump.

As long as one or two roots stay connected to the pup, success rates are very high.



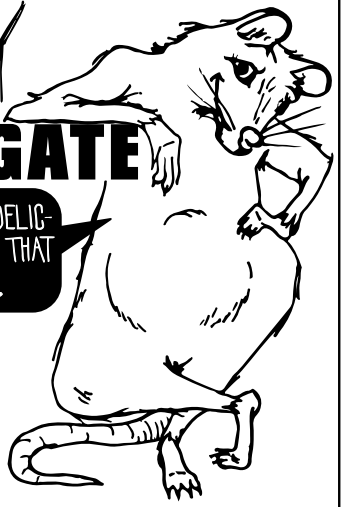
A little math: start with 10 banana plants. Take 5 clones or pups from each per year. At the end of year 5, you've got... 77,760 banana plants.

Shifting USDA Hardiness Map



Quick'n DIRTY

HOW TO: PROPAGATE



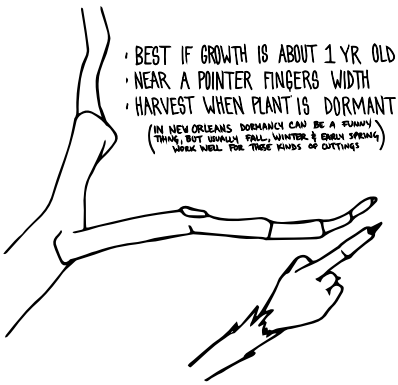
YOU KNOW THAT FIG TREE ACROSS TOWN WITH THE MOST DELICIOUS PURPLE FIGS? WHAT IF THERE COULD BE MORE OF THAT SAME DELICIOUS TREE!? GUESS WHAT, THERE CAN BE.

LET'S = PROPAGATE!

PROPAGATION IS A WAY PLANTS (AND OTHER ORGANISMS) INCREASE IN NUMBERS. LEARNING PROPAGATION ALLOWS US TO MAKE NEW PLANTS FROM A PLANT THAT IS ALREADY ADAPTED AND THRIVING IN A SPECIFIC ECOREGION. THERE ARE MANY DIFFERENT METHODS OF PROPAGATION, ONE WAY IS BY TAKING CUTTINGS.

THERE ARE TWO TYPES OF CUTTINGS THAT CAN BE HARVESTED FROM THE FIG TREE; HARDWOOD OR SOFTWOOD. WHILE BOTH SHOULD BE CUT BELOW A NODE, BETWEEN 6-10" IN LENGTH AND THE BRANCH SHOULD BE STIFF ENOUGH THAT IF BENT WILL SNAP. ONE IS HARVESTED IN A STAGE OF DORMANCY AND THE OTHER VIGOROUS GROWTH!

HARDWOOD



- BEST IF GROWTH IS ABOUT 1 YR OLD
- NEAR A POINTER FINGERS WIDTH
- HARVEST WHEN PLANT IS DORMANT (IN NEW ORLEANS DORMANCY CAN BE A FUNNY THING, BUT USUALLY FALL, WINTER & EARLY SPRING WORK WELL FOR THESE KINDS OF CUTTINGS)

SOFTWOOD

HARVEST FROM VIGOROUS NEW GROWTH IN THE SPRING (POSSIBLY SUMMER TOO IN NEW ORLEANS), BEST CUT IN MORNINGS WHEN PLANT IS FULL OF WATER.


NODES
JOINTS WHERE NEW GROWTH GROWS OUT OF!
IMPORTANT TO FIND TO INSURE NEW ROOT AND LEAF GROWTH!
6-10"
AFTER COLLECTING THE CUTTINGS PUT THEM INTO POTTED SOIL OR WATER AS SOON AS POSSIBLE, DON'T LET THEM DRY OUT. MAKE SURE MORE OF THE CUTTING IS BELOW THE SOIL. THIS WILL DEDICATE MORE AREA TO ROOT GROWTH AND KEEP THE PLANT FROM DRYING OUT. IT IS BEST TO HAVE BALANCED SUN AND SHADE, SO THEY DON'T DRY OUT OR ROT.
NODES
MAJORITY OF CUTTING BELOW SOIL
WHEN PROPAGATING IT IS ALSO ADVANTAGEOUS TO THINK ABOUT THE PLANT YOU ARE CUTTING FROM. START A CONVERSATION WITH WHOEVER LIVES THERE, MAYBE THE TREE HAS HISTORY! HAVE A CONVERSATION WITH THE TREE (ALOUD OR IN YOUR HEAD, WHATEVER FEELS BEST), LET IT KNOW YOU'D LIKE TO HARVEST CUTTINGS, BRING IT COMPOST OR MULCH, PROMISE TO TAKE CARE OF THE CUTTINGS AS BEST YOU CAN, LISTEN, THANK IT. IN BUILDING RELATIONSHIPS WITH PLANTS, WE DISRUPT AND DECONSTRUCT COLONIAL AND CAPITALISTIC ECOLOGY PRACTICES, WHICH IS IMPERATIVE!

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It's Going Down *is a digital community center for anarchist, anti-fascist, autonomous anti-capitalist and anti-colonial movements across so-called North America.*

itsgoingdown.org
twitter: **@IGD_News**
instagram: **@its.going.down**

A podcast resource for tree crops, perennial vegetables and insights from the people who breed them.

Propagandabytheseed.com

CLASSIFIEDS

When the one-way tickets to Mars go on sale, are you busy shopping for seeds instead?

Then EARTHBOUND TV is for you!

A cooperatively run youtube channel by farmers, gardeners, ranchers, weavers, tinkerers, carpenters and cooks sharing skills, experiences, frameworks and how-to's for communal autonomy.

tinyurl.com/earthboundtv

NDN Bayou Food Forest is a project to transform 11 acres of former monoculture in SW Louisiana into a site of intense food production and perennial & fruit tree propagation.

Sometimes seeking volunteers, if interested, please email Indianbayoufarm@protonmail.com.

Useful skills include: gardening, carpentry, electrical, irrigration, cooking, photo/video, art/design.

Insta: **@bayou_foodforest**

Earthbound?

We're cultivating crews in the PNW.
Summer intensives and/or
long-term worker collective
members.

cedarmoon.us/earthbound

Cedar Moon tends unsettling earth
with the Sacred Lands Alliance & TLC Farm,
on Atfalati and Clackamas lands: Portland, OR

CEDAR MOON

Further Reading

History/Analysis

Black Reconstruction in America, by W. E. B. Du Bois, 1935
The Black Jacobins, by C. L. R. James, 1938
Seeing like a State: How Certain Schemes to Improve the Human Condition Have Failed, by James C. Scott, 1999
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Dispersing Power: Social Movements as Anti-State Forces, by Raúl Zibechi, 2010
From Rebellion to Reform in Bolivia: Class Struggle, Indigenous Liberation, and the Politics of Evo Morales, by Jeffery R. Webber, 2011
Desert, by anonymous, 2011
An Indigenous Peoples' History of the United States, by Roxanne Dunbar-Ortiz, 2014
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Ramp Hollow: The Ordeal of Appalachia, by Steven Stoll, 2017
Freedom Farmers: Agricultural Resistance and the Black Freedom Movement, by Monica M. White, 2018
Sentient Lands: Indigeneity, Property, and Political Imagination in Neoliberal Chile, by Piergiorgio Di Giminiani, 2018
Katrina: A History, 1915–2015, by Andy Horowitz, 2020
The Dawn of Everything: A New History of Humanity, by David Graeber and David Wengrow, 2021

Culture and ethnography

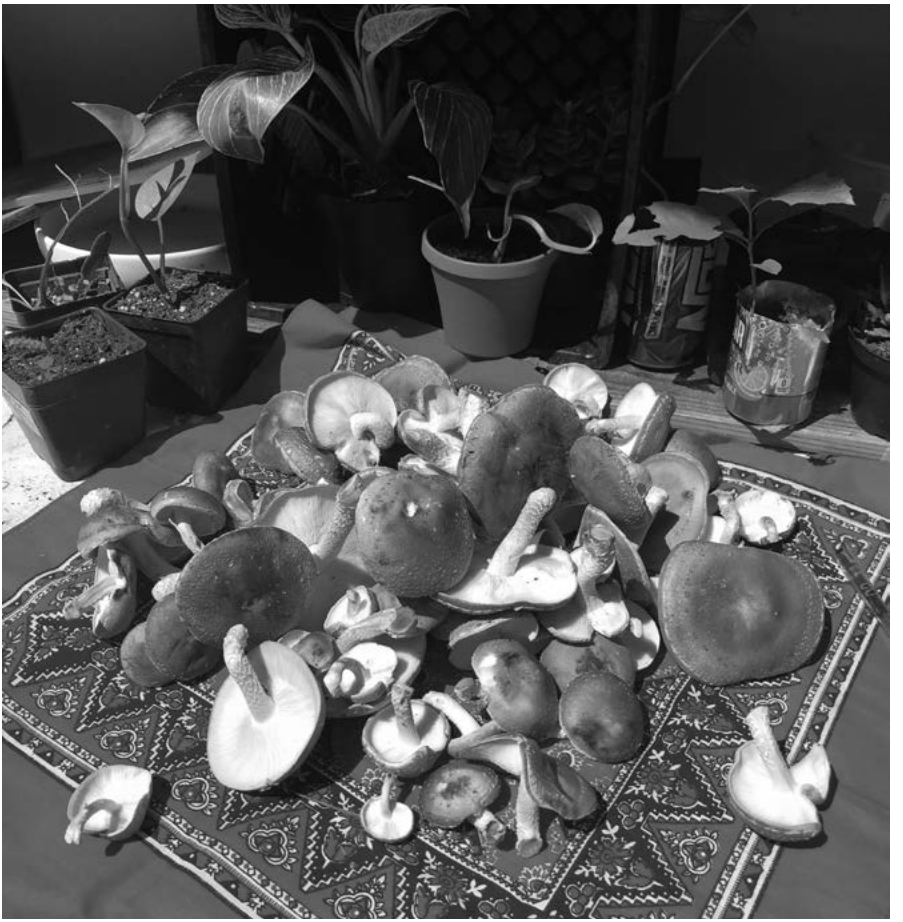
Earth Beings: Ecologies of Practice Across Andean Worlds, by Marisol de la Cadena, 2015
The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins, by Anna Lowenhaupt Tsing, 2015
Vital Decompositions, by Kristina M Lyons, 2020

Practical

Edible Forest Gardens, vols. 1 & 2, by Dave Jacke and Eric Toensmeier, 2005
Trees of Power: Ten Essential Arboreal Allies, by Akiva Silver, 2019
Organic Mushroom Farming and Mycoremediation, by Tradd Cotter, 2015
Radical Mycology: A Treatise on Seeing & Working with Fungi, by Peter McCoy, 2016

We appreciate everyone who contributed to make this second issue of the Earthbound Farmer's Almanac possible. We hope to be back next year so if you're reading this and excited to contribute to future issues, send pitches to lobeliacommons@protonmail.com with "2023 Almanac:" and the pitch topic in the subject by July 31st, 2022.

If you'd like to learn more about Lobelia Commons and the projects we're working on, check out @lobeliacommons on instagram and twitter.



2022

Sunrise/Sunset and Moon Phases

Historic Dates

Tarotscopes

EARTHBOUND

FARMER'S ALMANAC

This is a farmer's almanac for the end of this world and also the beginning of many worlds.

We glimpsed one such world emerging after the storm last Summer, as people in the darkened city gathered around generators and grills to share the brief abundance from their thawing freezers.

The crises all around us, and the attempts by the ultra-rich to flee the Earth entirely, make clear that none of the reigning institutions will make any effort toward our survival. The way forward, out of this mess, will mean charting a new course informed with Black and Indigenous knowledges developed through generations of struggle against land theft and enslavement. We will have to work together -- constructing and re-constructing the ability to sustain and care for each other. This almanac is for developing the necessary knowledge, infrastructure and practices.

In a moment when so many are refusing exploitative work, whether by striking, quitting, slacking, calling in sick or "lying flat", it feels both more urgent and more possible than ever to reclaim the joy and value of our work as meaningful.

The old farmer's almanac presented conventional wisdom. This almanac is a place for experimentation, for finding new forms and retrofitting old ones, for sharing stories of lived efforts toward a collective exit from this colonial nightmare, this separateness from the Earth.

Songs for the Orchard

Recipes

Plant Guides

Correspondences

Climate Weirdings