

Spring 2021 at Mezzacello

Well it's nearly Easter in this year after COVID19. My enclosed sustainable ecosystem is readying itself to come back to life. I decided this cold sunny day was the perfect day to record Mezzacello.

This is right before it goes through it's next big expansion. So here is a little slideshow from April 1, 2021. Let me know if you have any questions. There is some bit of trivia or an active experiment going on in everyone of these photos.

Don't Look a Gift Horse in the Mouth

Diversity

Diversity in an ecosystem is always a good thing. I produce high quality compost and fertilizers from various sources. But the poultry and rabbit manure have limits. And it takes time and energy to synthesize them to where the garden beds actually need those minerals and soluble nitrogen. What I need is manure from a larger herbivore with a more selective diet. Cows are OK but their manure is hit or miss and cows eat anything. Seeds can remain intact. No, what I need is horse manure. And I found some! Thanks to Facebook, Columbus Area Homesteaders group, and Abigail Santorine and her lovely little pony, Ginger. My niece and I ran over to Abigail's house and collected manure on a Monday night after work.

Community

I rarely mention this side of being an urban farmer. It takes a village to become a knowledgeable urban farmer and it takes a village to get all the resources one will need to get an enclosed ecosystem sustainable. It takes work and community.

I am from Los Angeles. I started “farming” in 2014. I have gotten A LOT of help. And it’s from a community that spans the globe and is right in my back yard. The Facebook group “Columbus Area Homesteaders” is a terrific group! Everyone on there is so empathetic and helpful (even me). If you are interested in Urban Farming, definitely check them out! Also, remember, a community is a garden as well. It needs tended, it requires care and attention, and you have to be willing to replace what you take out. Abigail, I want to support your passionate mission at Tiny Horse. I’ll post details in the comments on this post! Thank you!

Lesson: Micro Hydroponics Systems

Students will repurpose takeout container to start growing seedlings in a small hydroponic container with a heat map to promote germination and growth,

Lesson: Creating Perfect Fertilizer

Students will explore the molecular nature of fertilizer and its relationship to NHCOPS, the water cycle and the sun.

The Vision for the Formal Gardens

Six years ago around this time we started mapping out the “rooms” of the formal gardens. We cut out the sod and recycled as much of the dirt as we could and turned the rest into sod rolls for our neighbors. We had 60 rolls of sod. Then I aerated the beds well, and in a few select spots dug the swales which I filled with old wood and dead branches. Then I covered everything over with dirt, compost, weed fabric and mulch. We had nothing to put in the beds. By sheer luck, a neighbor posted on social media they had some boxwoods they wanted to re-home. But we knew we needed something more. So Rick went about making cuttings of the Annabelle hydrangeas we found in the neighborhood. He stuck them right in the ground and let me use my systems to nourish them. This was our first hedgerow.

It’s fun to think about those tiny boxwoods – all 36 of them! Rick put them to use to frame the formal garden rooms. They were all donated from a neighbor who had inherited them from the previous owners of their house – who happen to now live down the street from us. So we made three truckload deliveries and Rick planted every last one of them. It was hard work. They are so much bigger and more vigorous now. The systems for

developing compost, the manure, the additives, and the water swales really make a big difference!

It's funny to see Mezzacello this way. Today the flowers and hedgerows frame everything so well. And the 36 Hornbeams are all almost 4 meters tall now and a solid wall of green.

I did almost all of the labor here. Rick helps, but it is my job to fertilize and plan systems. This one I cannot take credit for. Rick is the genius behind this plan. I thought he was being over generous in his proportions and scale. I was wrong. This garden has matured beautifully. I can only imagine what our neighbors must have thought of the “racetracks in the grass” that was our yard in 2015. Rick had a vision. And it is today one of my favorite places in the world.

Update

The Paths To The Ecosystems

The roads most traveled on an urban farm and what these paths to the ecosystems tell us. How the ecosystems of Mezzacello connect.

Next Steps for Project

Martian

With the success of Project Martian last summer, I am making plans to extend my research. Last summer was about optimizing yield and harvest ability of the selected crops. I am still doing well in my winter larder! This spring and summer will be about implementing technology and automation to extend my mission into other food deserts.

Stay tuned for #ProjectBioLEGO. My first foray into automation agriculture and ecosystem management.

The Foodist: Rabbit Pot-Au-Feu

Pot-au-Feu is usually made with two cuts of beef and lots of fresh herbs and vegetables. We have lots of the latter but no beef; we raise rabbits. So rabbit it is! I love this in the fall and winter, we love it with fresh herbs and vegetables so it needed to be a summer meal – But I can use the root cellar vegetables and herbs that I dehydrate and store. So we are adapting as we go along.

INGREDIENTS

- 5 sprigs of parsley
- 2 sprigs of thyme
- 1 large bay leaf
- 4 large leeks
- 4lbs of rabbit (a whole rabbit)
- 2 cups beef broth
- Rabbit Kidneys, liver and chicken liver, quartered

- 1 small head of cabbage cut into 8 wedges
- 4 large carrots cut into quarters
- 2 medium purple turnips peeled and quartered
- 2 large cloves garlic, peeled and crushed
- 1 large yellow onion
- 4 medium Yukon gold potatoes peeled and halved
- 8 toasted pieces of crusty bread
- 1/4 cup Dijon mustard
- Salt and cracked pepper

1. Tie the parsley thyme and bay leaf together in a 10" square of cheesecloth with string. This is your bouquet garni.
2. Place rabbit but not organs in a 10-12 quart dutch oven and cover with 1" of cool water. Bring to a boil over medium-high heat.
3. Fill an additional 6-8 quart pot with salted water to a boil. Add the cabbage in and boil for 3 minutes. Drain and set aside.
4. Skim the fat from your boiled rabbit. Add the bouquet garni, leeks, cabbage, carrots, turnips, onions, garlic and 2tbs salt. Add beef broth and enough water back to the pot to cover the vegetables. Return to a boil.
5. Skim the water again after the boil. Turn the heat down to low and partially covered. Cook at a simmer. Continue to remove fat occasionally.
6. The rabbit will take a few hours to cook. Remove the vegetables as they cook. Set the vegetables aside after they cook.
7. Boil the potatoes for 20 minutes. Drain and set aside.
8. Remove the rabbit from the broth and set aside. Cover with foil.
9. Feed the the bouquet garni to the chickens. Add the organs, vegetables and potatoes to the broth over medium heat. Heat them through.
10. Serve up mugs of broth. Add the Dijon mustard to 1 cup of broth. Use this to spread on your bread. Spread half

on the platter you will be serving the Pot-au-Feu on.

11. Transfer the vegetables to a platter. Plate the rabbit. Pour enough broth over the dish to add a shallow pool of broth. Add Salt and Pepper over the dish.
12. Serve.

The Foodist: Potato Galette

This fantastic galette is a favorite and a crowd pleaser! Crispy and creamy and easy to make as well!

Winter Soldiers in a Garden

Food is complex. The types of food I grow at Mezzacello are optimized mostly for three things:

1. Caloric Benefit
2. Rate of Growth and Yield
3. Seasonal Duration

Today's blog post is about 2 and 3. The vast majority of crops that I grow are root crops or squashes. They grow well in my #ProjectMartian beds and they can last three seasons with proper precautions. Then there are the "super crops" or "winter soldiers" like chard, kale, leeks, and green onions. Root crops sweeten, but don't continue photosynthesis like green onions, leeks chard and kale do. They may not be strong on the first optimization strategy, but they are great for

flavor and reliability.

The other intriguing component of leeks and green onions: they are essentially immortal. The leeks and green onions you see in this garden in 2020 I planted from either seed or cutting in spring of 2017. If you mound dirt (or compost around leeks and green onions, they will root well. Then when you harvest them, leave the cut root in the ground and a new plant will replace it. Three generations of green onions in 2020 alone. And the leeks were bought at a NC garden stand on highway 12. I kept the bottoms moist in paper towels and brought them home. They lived in a five gallon bucket of water all winter of 2019 (I wanted to move them and replant them and forgot) and yet they persist. These are my winter soldiers!