

Life on the Land and Systems Sustainability

Part of a series of blogs regarding the UN 17 SDG and my work on the farm. This one is goal 13 life on land.

Gilligan's Island meets MacGyver meets Ray Bradbury

When I was a young boy I would watch the reruns of "Gilligan's Island" every afternoon. I would laugh and enjoy the larger than life characters and situations. My favorite and most despised character was the professor. How could someone so smart, so creative, and so well versed in the practical application of bamboo NOT get them off the island – but he could make a bamboo and salvaged outboard boat engine hair salon, complete with hair dryers and sinks, on a desert island? It was maddening to me. This week our neighborhood friend Eva Knutson gave us 12 branches of bamboo. Well, I have always been in MacGyver mode here at Mezzacello, so I figured out a creative use of that strong, lightweight, and flexible bamboo: potato plant stringing matrix.

This is my third batch of potatoes this season at Mezzacello in the #ProjectMartian planting beds. I grew Yukon Gold, then Redskin potatoes. The plants and tubers grew very well in the amended growth substrate. The problem was always that the plants would start to wither and lay about. Soon after they looked so miserable I had to harvest them. Well now I have a stringing matrix that is #ZeroWaste and much more robust than jute stringing alone. Thanks Eva!

I would also like to thank my neighbor and fellow #UrbanFarmer Simon LaBozetta. Simon is a #WorldClass potato horticulturalist. It was Simon who convinced me that I could grow multiple generations of plants in my #ProjectMartian compost and regolith substrate. I just had to insure the spuds had the right amendments and nutrients and then the detail about supporting the plants. So the Ray Bradbury bit, that's a nod to Simon. On Mars, those plant's leaves are going to need all the sunlight they can get!

Preservation, Seed Vegetables, and Recycling

I am continuing the midsummer harvest from the soil-free lasagna garden beds. Today it was another bushel of red potatoes, a bushel of shallots, and a bushel of red onions. I gathered them all in inexpensive laundry baskets lined with burlap. The burlap is there to hold the peat moss, straw, or sawdust in the basket. This helps keep air and light off the potatoes and onions and preserves them over the winter. The first year I experimented with preserving dry roots like potatoes and onions, I stored them in sand. It worked for short periods, but I had a lot of potato and onion rot from the sand, which absorbs moisture from the environment. So I switched to peat moss and sawdust. The side benefit is that I can reuse the storage medium in the lasagna beds. #ZeroWaste sustainable self-contained garden.

When I carted my three bushels of produce down I to my cellar, I was met with another surprise. There are still two baskets of russet potatoes in peat moss down there. Granted, each bushel basket only has a few potatoes left, but those potatoes

were sprouting! I pulled them out, cut the eyes apart and prepared to plant them for fall. I pulled the burlap back. Mixed the peat moss with bone meal, blood meal, some rabbit droppings, Epsom salt and a bit of algae water from the pond. Voila! A reseeded potato bed. 20 more potato plants for the fall. These beds really are magical.

Lasagna Garden Mid Summer Update

It's mid summer at Mezzacello. Today many of the garden beds are resting after harvest. Seedling are coming along in the greenhouse and I am fortifying the lasagna beds with molecular iron and magnesium sulphate (Ironite and Epsom Salts) and a mix of urea, blood and bone meal. All beds will also get a good dose of algal water from the biofilter. That should help fortify the fall harvest.

You can see in the photo above the conspicuous lack of weeds in the burlap beds. The dried weeds on the stepping block are what I pulled last week when I harvested carrots, onions and shallots. There are more weeds in the mulched beds than in the burlap. The ducks are my grub and beetle assassins! The love rooting with their bills around the holes in the burlap and they eat the beetles right off the squash. They don't eat vegetables so there is that, but you have to watch them around delicate plants like carrot or asparagus fronds. Their waddle over everything.

I am very pleased with the performance of both the lasagna garden bed matrix and burlap. It absorbs and holds moisture and nutrients very well. Now I need to start experimenting with cut patterns and spacing in the burlap matrix. This year

I tried layering the burlap in strips and planting in the spaces where the burlap edges met. I find this to be impractical. It encourages creeping weeds to grow and fine seedlings grow through the burlap and become inhibited. The cut gash pulled away from the seed plant is much better. Lesson learned.

Unexpected Benefits

I have known for some time that the burlap has been an effective (albeit expensive) form of mulch. It holds water like a dream, controls weeds very well, and tots down beautifully. I have been curious to the why of the burlap's effectiveness. It does not block all light from passing. It strongly filters the light. Weeds do still grow under the burlap. They grow sporadically for sure. Much much less than organic mulch or bare earth for certain.

But the other interesting impact is that weeds can be growing for weeks and one doesn't know it. The weed takes root in the soil and starts to grow but it grows slowly starved of sunlight. You don't notice it at first. It grows so slowly that over the course of a few weeks it finally begins pushing up the burlap. When I see this, I simply reach in either from the edge or a planting slit and pull the weed in seconds flat. Because it is so weak it pulls right out. That makes the cost of the burlap (roughly \$120 for the 350 sq ft of 24 3'x5' beds) well worth it in terms of time saved. I spend around 15 minutes a week weeding.

The Exceptions and the Victories

The one major exception is creeping clover. It loves to send its tendrils under the burlap from along the edges of the semi-raised bed. It takes seconds to pull and it slides out from beneath the burlap quite easily. You can see it along the edge of the bed in the photo above.

The most astounding victory of this burlap mulch for me has

been the near complete termination of poke and belladonna in my garden. In 2018 I had a poke, belladonna, and cherry tomato catastrophe. Nothing grew. I could NOT keep up with the weeds. I felt like such a failure. I have had 3 (Three) poke plants so far in this garden. One beneath the burlap and two that grew along the edge. Belladonna is still an issue along the perimeter but has yet to grow where there is burlap.

The next horizon to explore is how to keep the fence line around the garden poke, belladonna, rye and crab grass, and rabbit and groundhog free. The plants love to grow in the welded wire fencing that is behind the picket fence. The wire keeps chicks, rabbits and groundhogs out really well, but is a liability with the weeds. This is where focus will lay next. If you have any solutions, hit me up!

Foodist: Perfect Quiche

Perfect Quiche has the perfect texture, flavor combination, seasoning and is gorgeous. It makes a terrific meal anytime of the day. Perfect Quiche is so versatile. Add your favorite meats, cheeses, vegetable or herbs to make it your own creation.

Course Breakfast, Entree

- Prep Time 30 minutes
- Cook Time 50 minutes
- Total Time 1 hour 20 minutes
- Servings 6 -8 slices
- Author Susie Gall

INGREDIENTS:

1 store-bought pie crust read package directions for pre-

baking store-bought crust or if making homemade pie crust (follow recipe in the Notes section)

BASIC RECIPE FOR FILLING:

- 1 cup shredded Swiss cheese • 1 cup shredded Gruyere cheese
- $\frac{1}{4}$ c shredded Parmesan cheese
- $\frac{1}{4}$ cup grated Parmesan cheese
- Favorite herbs – if available fresh are best
- $\frac{1}{2}$ c onion – sweet yellow or Vidalia – sautéed
- 6 eggs
- 1 $\frac{1}{2}$ c heavy cream
- $\frac{1}{4}$ – $\frac{1}{2}$ t nutmeg or $\frac{1}{8}$ t grated fresh nutmeg
- $\frac{1}{2}$ t white or black pepper

Optional Ingredients for the 2 different quiches I made)- see Notes*

Added ingredients for Prosciutto-Apple Quiche

- 2 slices Prosciutto – fried crisp
- 1 Gala apple – peeled cored & diced • extra slice of crisped Prosciutto for garnishing
- $\frac{1}{2}$ tsp Parisien or Fines herbs or your favorite herbs

Added ingredients for Tomato-Basil Quiche

- Reduce heavy cream to 1 $\frac{1}{4}$ cup heavy cream due to extra liquid added with tomatoes
- 1 T fresh chopped basil
- 2 med-large fresh tomatoes – extra juice squeezed out peeled & diced
- Basil leaves & tomato slices for garnishing the top of quiche

1. Use a 9" pie pan. 1 Use a 9" pie pan.
2. Preheat oven to 350F *(if using store-bought pie crust, the oven temperature should be higher for prebaking crust then turn down the heat to 350F)

3. Prebake or blind-bake crust w/foil & beans – follow package directions for pre-baking store-bought crust. If using homemade crust, see directions in Notes section)
4. While crust is cooking, sauté onions and divide dry and wet ingredients into separate bowls.
5. Combine all dry ingredients in a medium bowl and blend well.
6. Combine all wet ingredients (including sauteed onions) in a medium bowl and whisk well.
7. Place 2/3 c dry ingredients in cooked crust
8. Pour 2/3 c liquid ingredients on top of dry ingredients
9. Place the last 1/3 c dry ingredients on top of ingredients in the crust.
10. Pour the last 1/3 c liquid ingredients on top of all ingredients in the crust.
11. Opt: Add garnishes on top.
12. Bake for 50 minutes or until egg mixture is just set.
13. The quiche will continue cooking after removing from the oven.
14. Cover and refrigerate leftover quiche.

Recipe Notes

DO NOT ADD ANY SALT – cheese is salty so adding extra salt is unnecessary and the end result will be too salty if extra salt is added.

This quiche is so versatile. Both variations I made turned out beautiful and delicious. We could not decide our favorite. The quiche I enjoyed in Hermann, MO was made with canned artichokes and frozen spinach. I don't know the amounts used, but it was fantastic. Neither ingredient overpowered the egg mixture, so I think equal portions of each were used and not a lot of either one.

This is the pie crust recipe given to me along with the quiche recipe, but I used store-bought crust and it tasted great.

Mezzacello note: Rick makes this quiche with duck eggs and it

Easy Classic French Bean Poles

Inspired by classic beanpoles at French Chateaux, these are a modern update that are easy to build. This includes directions.

Producing Food and Eating as an Art

One of the benefits of Mezzacello is the the unique differences between Jim and I. The marriage of different perspectives on some of the things we already value. We find ourselves delving into aspects of things that we otherwise might not have. Jim enjoys the animal husbandry science, and culture of the farm, whereas I'm more about the herbs, fresh food and formal garden beauty. He enjoys producing food, but not so much the art of cooking. He likes to say "I produce food, Rick creates art with it." I could say I cook, but I rely on his farming for produce.

His French background has gotten me into French cooking, which I might have been a little intimidated about ...until breaking it down and learning a few techniques. I cut my teeth on Jacques Pepin and his Fast Food My Way, working through his books in a kind of Julia & Julie way.

It makes it a lot easier to be creative and effective when you have access to fresh, seasonal food. We raise chickens, ducks and rabbits. All three are essential to French cuisine. So we have adjusted the vegetables and herbs to augment this French menu. I have modified the garden to meet the needs of some German cuisine as well.

Every lesson learned is a new opportunity to create tasty and fresh food with a minimum of processed food from the middle of a modern grocery store. Julia was a strong proponent of preserving food and using fresh ingredients in unique ways. Jaques Pepin continues that legacy with his “Fast Food My Way” series. I am also a fan of Jamie Oliver’s terrific new cook book, “5 Ingredients”. Both of these honor the spirit of an urban garden and the spirit of Julia. We’d love for you to share some of your recipes! Tag #Mezzacello in your posts! as Julia, Jacques and Jamie are all fond of saying, Basta! and Bon Appetite!

A Garden of People and Ideas

Mezzacello is an enclosed urban garden ecosystem. There are many gardens on the property. One of the most important is the gardens of people and ideas.

What do I mean when I say a garden of people and ideas? Well, Mezzacello is just too big for me to do on my own. I need help occasionally from friends and neighbors. I use social media, my blog and my contacts at the [PAST Foundation](#) to help gather those people to help me at the farm. I also call on my neighbors around Mezzacello. In return for food, flowers, eggs, compost, and manure they provide me the occasional volunteer or perform ESSENTIAL neighborhood watch efforts for me. I provide eggs and food to young mothers and the elderly

along my street, and in return they watch out for me. I have on many occasions had a neighbor text me to tell me your chickens are out, or there is someone in your yard.

You may not think of this as a garden, but if you reframe the problem you see that it really is. You tend these relationships. You make them healthy and sustainable. You feed them with grace and kindness and they return a yield. Rick's formal gardens give them something beautiful and peaceful to look at or aspire to. A garden is a place for the mind, soul and body.

The whole point of Mezzacello is to reframe the idea of what it means to be sustainable and healthy in the 21st Century. There's no app for that. It requires hard work, novel ideas, good people and meaningful, rich and rewarding relationships. All of these are tended to – like a garden.