Shenaniducks! Those Ducks Are At It Again!

It takes one duck to override a safety mechanism on a robotic coop door. Never underestimate a duck an it's love of chaos.

The New Neighbor Who Has 100 feet

Well year two of #ProjectMartian has been a learning experience to be sure! My original idea was to test if we could send greens and browns to Mars to recreate compost and soil on Mars (we can). But I neglected one key plot point; Life will stow away. To cut corners this busy year I added horse manure (The Manure that Infected Mars) and I forgot that there would be organisms that would come with that UNPROCESSED material. Well, I only needed to learn that lesson ONCE. I have been turning the soil, allowing the chickens and ducks into the Martian Garden beds (They love centipedes and pill bugs) and using a flamethrower occasionally — think Ripley from "Aliens". I say to those centipedes near my tender shoots - "Get away from her you bi..." well, you get the idea. But the real secret — ironically is the diatomaceous earth (Martian Regolith) is the best answer. So I will be applying DE and Borax and making life very hard for these Earth-based composters. Stay tuned!

I let the chickens eat more than I destroyed with fire. Full Disclosure. I will post the Chicken and Duck #FeedingFrenzy next, I promise.

Why I Use The Metric System at Mezzacello

Yeah. That's a real map. The United States of America, Liberia in Africa, and the pseudo-Communist state of Myanmar (Formerly Burma). That's it. 190 other nations around the world, and the area of Low-Earth orbit, the moon, Mars and every probe ever sent out into Space (with the exception of the NASA Mars Probe Mars Polar Orbiter use the Metric System. You should all remember the MPO...

NASA lost its \$125-million Mars Climate Orbiter because spacecraft engineers failed to convert from English to metric measurements when exchanging vital data before the craft was launched, space agency officials said Thursday.

A navigation team at the Jet Propulsion Laboratory used the metric system of millimeters and meters in its calculations, while Lockheed Martin Astronautics in Denver, which designed and built the spacecraft, provided crucial acceleration data in the English system of inches, feet and pounds.

As a result, JPL engineers mistook acceleration readings measured in English units of pound-seconds for a metric measure of force called newton-seconds.

In a sense, the spacecraft was lost in translation.

Yeah. It's about to get real up in here. SpaceX and every new industry coming online in what is widely being hailed as the Fourth Industrial Revolution of digital and additive manufacturing are not going to mess around. They do not care about the way we have always done things. So I plan my beds, plant my food, grow my food, check my temperatures, build my

beds, and weigh my goods in Metric. Because the future is here. We are all just too stubborn to realize it.

To be honest it took me a solid three months to start dreaming in Metric. It's not hard. It's just a reframing of expectations and abstractions of **dimensions**, **mass**, and **volume**. I do not care that it inconveniences you. It is the way that 96.8% of the world already thinks this way (335,000,000/7,552,000,000). I have never — NEVER — met anyone not native to America who was annoyed that I could think and describe things in Metric. It's always just average Americans who are annoyed.

Yes, the entire time I was working on **#ProjectMartian** here at Mezzacello, every day I would wake up take measurements and if I had to, convert them myself into Metric. I would not want to be the unfortunate Martian who found out the hard way that that door seal was supposed to be 3cm but got mistranslated as 1" those six millimeters would be #InstantDeath. Switch to Metric already.

The Role of Air Conditioning in the Modern Kitchen

AC in AD. Most everyone I know in 2020 has AC (AKA Air Conditioning) we do not. Let me be clear: We have AC compressors, but we do not have; Copper in them, a functioning furnace from the 20th Century, or funds to rectify this any time soon. We do not complain. We KNOW it's all 1860 up in here. The two places where this is a real issue is:

- The kitchen
- The cellar

Everyone I know who is even remotely interested in homesteading does NOT understand why it is so difficult for us to preserve food at Mezzacello. I have access to digital sensors but not whole house AC. I know that our kitchen gets as hot as 33.3C (92F) on really hot days, but there are NO windows large enough in this house to place a window-mounted AC unit. When we bought the house in 2014 the downstairs unit had been plundered for copper by thieves. The upstairs unit was plundered two years later.

We know the house needs a serious electrical upgrade. But the fact of the matter is that our electrical system CAN NOT handle that. Our 1989 100Watt box just does not have enough power to handle that kind of AC load. So while you might have a fine kitchen with a 28C degree threshold — we do not. Neither did our ancestors. Fruits or vegetables left o the counter have a two day threshold. We must adapt. But until then, we will be creative. We will continue to lose squash and tomatoes that we don't get to canning or freezing immediately with our busy 21st Century jobs. We will continue to live in two rooms during the heat of summer, and in the dead of winter. Mezzacello is NOT a modern house; She is a homestead. We make do and we do amazing things with what we have. There is no time in my life where I consider how much better it must be to live in a modern house with zero access to land or character.

The only time we do is when we are amongst 150+ year old houses up on Kelleys Island or way out in the country where we KNOW exactly what those families when through to make life happen when the house was built, but someone with resources retrofitted them. It's nice to think of the modern folk living in those houses with all of the amenities. We'll get there. But first we need to clearly define what "THERE" is and earn the right to own it. Meanwhile, live your life to the fullest, count your blessings and take absolutely nothing for granted. Life is a love song of success, failure, and hope. Bring a

Man Versus Squash Beetles

This summer has been brutal. But I am not complaining; just making an observation. It is brutal not just because of the heat, but because of how prevalent the pests are this year, That mild winter in 2019/2020 did us no favors. On Thursday of last week I noticed one of my zucchini plants was looking sickly as well as a cucumber. My friend and colleague JuliaLynne Walker over at the Bronzeville Agricademy had put a call out to be aware of squash beetles and boy was she right! Last night the zucchini I had noticed was sickly was dead and I saw a squash beetle. I promptly cut a hole in the burlap mulch, buried a jar filled with soapy water next to the diseased plant and covered it with a board. Then I watered the board and the ground around it real well. The beetles love the damp wetness at night.

The next morning (AKA today) I went our with Neem oil and alcohol in spray bottles. Alcohol paralyzes them, Neem oil kills their eggs. There were a lot of beetles in the jar already. I cut the diseased leaves and removed the dead plant completely. Then I burned all of it. I counted 15 beetles on those leaves in the fire. I went all Khalesi and the dragon on them. I will go back tomorrow and check under that board again. I expect to find more. I also sprinkled diatomaceous earth all over the burlap mulch around the squash and cucumber. This will help control future outbreaks.

Next year when I plant squash or cucumbers, I will not plant next to a fence. I grow them on trellises to make harvesting easier. It works well with cucumbers and vining squashes like butternut, but not zucchini and yellow squash. I thought they would like climbing the trellis and having the fence as a backup for climbing. Really it was a bad idea because I backed myself into a corner with vining squashes because the whole back side of the plant was out of sight and air circulation was diminished. Lesson learned. Please share your strategies for growing healthy squash and cucumbers!

Sanitary Poultry Feeding

Birds are messy. Please don't judge my hen yard. I know it's messy. It would be even messier if I were still using the first type of feeder I tried at Mezzacello. One of those hanging affairs with a red bowl that releases food to the chickens and ducks to eat at their will. It's a great design, just no in a city environment. If you don't put it away at night it attracts mice, raccoons and rats. If you put it into the locked run, they knock all of the food out into the run and that becomes a mess. It also attracts rats. The other big problem with this type of open air feeder is small birds. They eat half the feed. Even when I switched the feed from crumble to pellets, they still swoop in by the 10s and 20s and gobble up large portions of food. And they bring an insidious guest with them; lice and mites.

So I have tried a few iterations to try to feed the poultry in a clean and efficient way. I finally came across this great contraption. It's called a treadle feeder and it is deceptively simple. It's a stainless steel box that holds five gallons of feed. The top is rainproof and secured. There is a hood to keep rain out of the feed basin below. The cool thing about this feeder is the spring activated treadle. It must be stepped up to open the lid to the feed tray (just like a hands free trash can lid; you step on the pedal and it opens). This

treadle is also weighted. Whatever steps on it MUST weigh at LEAST 10 grams to activate it. That eliminates birds and small rodents. I did not know this, but raccoons are averse t stepping on anything that moves, so it's raccoon and possum proof as well.

Since I started using the treadle feeder at Mezzacello last year, I have had to buy 40% less feed that in 2018. It is a remarkable device. It's not cheap, \$130 but well worth the cost and peace of mind. I simply step on the treadle in the morning to insure there is food there. If no food I just unhook the spring hooks on the lid, open the lid and fill it. No more food theft and 70% fewer little birds to crap and bring their pests along with them.

Sheds, Groundhogs, and the Opioid Epidemic

In 2017 a dear friend of mine donated an $8' \times 10' \times 12'$ (2.44m \times 3.04m \times 3.66m) shed that was on a property he was looking to sell. So I hired a group of workers that I saw hanging around in my neighborhood to help me disassemble and transport the shed to Mezzacello.

Full disclosure:

I tell this story as an educational parable about empathy and dignity. It is also a rather long post, but I do not want to break it up over multiple posts. I do not seek to denigrate anyone. But there were real problems with this project. I won't reveal the man's name. I just call this man the groundhog, but mostly because he built a foundation perfect for groundhogs and he became one himself.

The Foundation of the Problem

I had never built a building or a foundation before this. The groundhog was a plumber/craftsman and offered to take the measurements of the shed. Well the measures were very off. $10' \times 12' \times 12'$ (3.04 x 3.66 x 3.66 m) to be exact. We went to Menards and bought the materials and laid a square foundation. Then we started assembling the shed. It QUICKLY became apparent this was not going to work.

But the groundhog insisted he could make this work. So we modified the foundation to fit the 8' section on the east/west axis and that left a 2' (61 cm) deck to the north of the shed. Well the other mistake is that we left gaps in the foundation and built the floor deck over that. That made the shed foundation a MAGNET to real groundhogs, rabbits and the occasional rat. The shed went up in one day. The roofing went up the next day. And voila! We had a shed at the southwest corner of Mezzacello.

A week after the shed was completed is when the Groundhog told us he had been evicted from his apartment. Having no ID or bank account was an issue for him. Then there was the prison record and the fact that his license was suspended, so he could not drive. We offered to let him crash in the shed. That night we found all of his possessions in the shed. Over the summer we got the house painted, and we organized all the wood and tools. But once he was ensconced in that shed it was almost impossible to evict the groundhog. It's not like there was a lease. It was a man crashing in my shed.

Things Get Worse

That's when we uncovered the heroin addiction. That was a very hard and dark day. I knew that there was a very real issue of opioid addiction in Ohio. But I did not expect to see it so intimately. We were ignorant and naive. We also discovered the massive theft of equipment that was happening as the groundhog

was selling equipment at pawn stores for liquid cash. My first instinct was empathy and concern. My second instinct was anger and concern. We offered to help him get treatment. He refused. He'd avoid us all day and then at night come around and steal equipment, bikes, rifle through cars on the street. This went on for three days until we finally had to get authorities involved. He was escorted off the property by police. But still he came back. We were unaware that he had the code to the digital lock on the house. We caught him on camera in the house and that was that. I got in touch with his brother and asked him to come and collect the groundhog.

It's one of the saddest stories I have at Mezzacello. It leaves me conflicted. I struggle between my desire to help and my naive ignorance that everyone's motivation is equal and positive. I have made poor choices. I created Mezzacello to be a learning lab for education but this was a wicked and heartbreaking lesson to learn. I am checking my privilege. I am owning my mistakes, assumptions, and ignorance. The shed still stands. But my heart breaks every time I think of its' pedigree. Eventually I will replace it completely. But waste not want not today is my motto. It is functional and a testament to the human condition. Useful, fragile, full of hope and potential and good intentions but subject to sadness, pain and hubris. Lesson learned. But my optimism to help others remains. I am just wiser and more sophisticated about it.

Stay there for each other. Be there for others. At some point you have to show up for yourself as well. My instinct remains, don't build a wall, build a bigger table. But demand honesty, dignity, and respect at that table.

Climate Change, Ducks, and Optics

This week's post is about a photo. This photo to be exact. I took it at 16:00 on Sunday February 2, 2020 in Columbus Ohio. Not Raleigh, NC. Columbus.

What Is Wrong Here?

The ducks should not be foraging for bugs in the dianthus patch beneath the magnolia tree. There should be no green growth in the dianthus. There should be no lens flare because the ambient temperature should be closer to OC not 16C. This is Spring weather and that is the wrong cue for Mother Nature.

This is worrisome. I am not a negative person. I am a farmer and I am being practical. Externally I am grateful for a glorious Spring day. But not in February in Ohio. Nature is a balanced system a machine of life. There are feedback loops and consequences when blind nature responds to misplaced cues. And at this latitude that system and cue should be in full on frost mode. But we are not. I say invest in the allergy meds and weed and insect treatments now. We are going to need them. Systems are about to get all bent out of shape. And spring is going to be very "interesting" event this year. Yes it's a cool photo. But sometimes beautiful things can portend great danger, or at the very least great challenges.

Secret Life of the Farm at

Night

Mezzacello is an urban farm. We are surrounded by homes and businesses and cars. There are also a lot of transients in my neighborhood on the near East side of Columbus. It's a fact of life. It's still jarring when you come upon sights like this. One glove, a set of ear buds and an iPhone 7+ headphone jack dongle, a snap adapter for a water hose, and an unbroken set of attached chopsticks.

The mind boggles to consider what these four things share in common. I'm pretty sure I dropped the hose snap adapter last fall, and I am also pretty sure the earbuds and adapter belong to Rick. But the glove and chopsticks? I know we have night visitors. I find the beer cans and their cigarette butts and crushed boxes as well as other hints to their crushed hopes and dreams. But this is largely isolated to the warmer months. When this human or humans dropped their chopsticks or gloves, did they not see the earbuds? What made them just leave all of this there? There is great literature waiting to be created to explain this story. But for now, the farm needs tended. Chores!

Tonight perhaps I'll write a Steinbeck-themed poem to this night mysteries. I shall call it "The Drops of Drifters".

Applied STEM, Not a Meth House

When I tried to bronze chain in oil in our oven and discovered Applied STEM, not a meth house.