# From Data to Compost to Life

We take data very seriously at Mezzacello. This is a blog post about how surveys become part of the compost. This paper contains accelerant.

# BioEngineering Summer Camp 2023 Guest Blogs

These are two guest blogs written by middle school brothers for my last bioengineering summer camp. Their drawings!

#### Let's Start a Farm On Mars

In this blogpost I explore all the pieces that I have developed to pursue my dream farm on Mars. power, water, nutrients, and food.

## BioDome 2 Power Systems Integration

A quick update on the Biodome 2.0 at Mezzacello. We are getting ready to integrate power and water reclamation.

# Lesson: Vital Signs and Ecologies

This lesson is an exploration of the way that ecosystems all work together and find life. Here we take their vital signs.

#### Why Voting Matters Here

A blog about why voting matters and understanding what we need to do to be effective gardeners. See the leaf and the tree to understand.

## Energy and Sustainability

As part of a series of blogs on UN 17 SDG at Mezzacello. This one covers energy infrastructure and it's impact on sustainability.

#### Energy and Culture on an

## Urban Farm

When do you live your best life, be there for others and make space for food and life? Hard to live in this century and farm.

#### Lesson: Creating an Ecosystem

Students will create a map or maquette of the ecosystems of Mezzacello and determine using science and data if it is an ecosystem.

## **Pop Up Compost Piles**

At Mezzacello, the various ecosystems always need tending. When we know that a garden bed will need to sit fallow for a season because we either don't have time or money to get it done, I will intentionally plant nitrogen-fixing crops like clover or hairy vetch to promote nitrogen and moisture in the soil. The parterre gardens were finally ready to be planted. All of that clover, hairy vetch, dead leaves and twigs needed to be collected. Call it guerrilla composting if you will. But it's a great way to amass one cubic meter of biomass quickly.

To all exterior perspectives, this seems preplanned. What the general public doesn't know is that this strategy started because Rick is too lazy to haul all of his waste to the compost bins on the western edge of the gardens. So I just started collecting wastes in the right balance. I

intentionally placed and distribute the dead leaves and twigs in the bed with an approximation of the amount of greenery that I am most likely to harvest and commensurate brown materials and manure waiting to be mixed in. I needed to balance out the greens with browns. It's not the prettiest way to do this, but it really works well in a pinch. All my neighbors and friends know that we are building Mezzacello as we go. I have systems. I document those systems and modify them as I go along to maximize learning from failure and success. I have found this pop up compost to be really useful.

All I have to do is collect it, mix it, and move it back to the compost bins and it's ready to go. If I harvest it in the right season, I'll mix in some more manure, mulch, added greens, and peat moss and voila! Instant lasagna garden! Of course Rick bought 64 boxwoods for the parterre do the lasagna garden isn't happening this summer, but there is another garden ecosystem that can use this bounty.