



CSA News

December 13-21, 2021

Fall CSA Week 10

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**THIS IS THE FINAL WEEK IN THE FALL CSA SEASON!
REMEMBER TO USE YOUR FARM CREDIT & ACCOUNT
BALANCE BEFORE 12/31/21.**

Farm Share Storage & Use Tips:

- Beets, radishes, carrots and hakurei turnips: Store in a closed container in the fridge to keep firm. These will keep for weeks.
- Cabbage: Keep dry, unwashed cabbage in the vegetable bin of the refrigerator. If the outer leaves lose their firmness, remove and discard those. Once cut, wrap the open side, and continue to refrigerate; it should keep for several weeks more.
- Ginger and turmeric: At the farm we freeze whole, then pull out and grate what is needed, then put back into the freezer.
- Garlic, onions, squash, & sweet potatoes: Leave on your countertop or in your pantry; keep onions in the dark to prevent greening.
- Leafy greens (arugula, kale, mizuna, tat soi, bok choy, lettuce mix: Store in your fridge in the bag it comes in, or use a salad spinner and store in an airtight container.
- Green Onions: Loosely wrap if desired and store them in the crisper drawer of your refrigerator. When using, chop off as far up the stalk as you find tender.
- Peppers: Wrap, unwashed, in a paper towel to absorb any moisture, and keep it in the veggie drawer of your refrigerator.
- Potatoes: Refrigerate in a perforated plastic bag.

Soil is the Soul of the Farm

In last week's newsletter, I wrote about the cattle's contributions to the soil food web. We think and talk a lot about soil here because it's the very basis of everything that we do.

The foundation Elmwood Stock Farm is built on is a soil called Maury Silt Loam. This is a type of soil that is considered fertile with good structural components. Plants' ability to perform is based on the physical and chemical properties associated with each type of soil and the wildly complex biological happenings among the microbial community in the soil, out of sight.

The Science of Soil Management

Looking at the soil, you would think there's not much to it. It's just a bunch of dirt, after all. But the science behind it all is impressive.

Structural components of the soil are classified by the combination of sand, silt and clay particles that make up dirt:

- * Sand is like big boulders that have big gaps between them, allowing water and air to pass between them easily.
- * Silt would be comparable to pebbles that fit between the boulders.
- * Clay particles are tiny, flat structures that stick together and fill in remaining voids. Less clay in the soil means more voids that allow roots to penetrate more easily and allow air and water to reach those roots. The sub-soil tends to be more full of clay in the Bluegrass Region, sometimes forming impenetrable barriers to roots, air, and water. Roots' ability to spread throughout the soil directly impacts a plant's ability to be well anchored and reach the nutrients it needs for optimum growth.

A good mixture of sand, silt and clay is considered a healthy soil, which we are blessed with on Elmwood Stock Farm.

The chemical properties of soils are important and are directly related to the structural components. Reaching back to high-school chemistry, you might remember that particles have positively and negatively charged properties called cations and anions. Like a magnet, a strong positive charge will hold a negatively charged anion in place. This is the action that holds available nutrients—like calcium, magnesium, sulphur, etc.—in the root zone. We monitor the Cation Exchange Capacity (CEC), which is an indicator of how well the battery is charged, revved up and running. Plant roots and their symbiotic mycorrhizal fungi mineralize these nutrients for plant growth, but only

when the soil particle is willing to give them up. Our relatively high CEC numbers—determined by a laboratory test—demonstrate healthy exchange of nutrients.

The Soil Food Web

The biological properties of a soil bring all this to life. There are tens of thousands of species of bacteria, fungi and microscopic “insects” that colonize the soil. The more diverse these colonies are, the more likely they are to foster good plant growth. This microscopic ecosystem is the soil food web.

One of the few things we all remember from first grade is seeing all those creatures in a drop of rainwater under a microscope—an unimaginable number of bugs swimming or floating in and around and amongst each other. Look at a drop of soil water, and the complexities of coexistence go up several orders of magnitude. Our do no harm philosophy of farming without synthetic chemicals gives this soil life every opportunity to thrive.

The microbes and microscopic insects, along with earthworms and larger insects, align the structural components to form little havens—even structural houses—called aggregates. Within these aggregates are chambers that hold water to feed the microbes and the plant roots that encounter them. As these microbes prosper, they release nutrients to feed the plants and recharge the CEC.

With our eight-year crop- and livestock-rotation plan, we can harvest vegetables three years in eight while maintaining a vibrant soil food web. We have no need for off-farm fertility fixes to feed our plants. (Sometimes we feed the soil with rock dust to add minerals and trace elements, but that’s it.)

The Art of Soil Management

All of that is the science, and the management of the soil is its own art. From decades of sound farming practices, our soils are like Olympic decathletes. The sand, silt and clay particles have been managed by us, the plants, and the diverse array of microbes to be able to perform in all conditions. Too much rain, and they drain the excess away efficiently. (Good farmers know not to handle the soil when too wet, as it will destroy the structure.) Too little rain, and they hang on to all the moisture they can. A little disruption from cultivation, and they easily re-form their colonies.

We are proud of the soils we have built here at Elmwood Stock Farm, and they’re all thanks to your support. We wouldn’t be growing all this food and caring for all this land without you. Thank you for appreciating the quality of the produce they produce. —*Mac Stone*

Recipes

Roasted Beet and Red Onion Salad

Adapted from Tori Avey

3 medium red beets (about 1¼ lbs.), cut into 1/2" cubes
1 small red onion, sliced very thin (regular or cipollini work nicely)
1/4 cup extra virgin olive oil
2 tbsp vinegar
¾ tsp salt, or more to taste
1/2 tsp cumin
1/4 tsp pepper, or more to taste

Preheat oven to 450 degrees F.

Cut beets into equal-sized pieces.

Enclose beets in a foil packet on a baking sheet. Roast for 45 minutes. Check for doneness at 45 minutes by piercing the largest beet with a fork. They're ready when they pierce easily. Set aside and let cool.

Whisk together olive oil, vinegar, salt, pepper and cumin in a salad bowl.

Peel skins off beets.

Add beets and onions to salad bowl and toss to coat with dressing. Marinate for 1 hour at room temperature, then serve on a bed of lettuce.

Sweet Potatoes Stuffed with Quinoa & Greens

Adapted from Green Valley Kitchen

2 medium-sized sweet potatoes	1/4 c. pecan pieces
olive oil	1/4 c. dried cranberries
1 bag greens, chopped	2 oz. feta cheese, diced
1 clove garlic, minced	salt & pepper
1½ c. cooked quinoa	

Preheat oven to 400 degrees F.

Slice sweet potatoes evenly in half lengthwise. Coat them with a little olive oil, and place face down on a parchment-lined baking sheet. Roast for 30 to 40 minutes, until tender and soft. Let cool slightly.

Add 1 tablespoon of olive oil to a large sauté pan over medium heat. Add garlic and greens. Cook greens in batches until all are wilted. Remove from heat.

Stir quinoa, pecans, cranberries, feta, pepper, and salt into greens.

With a small spoon, gently press down on the center of the sweet potatoes to create a small indentation the length of the sweet potato. Spoon quinoa and greens mixture evenly into the indentation and serve warm.