



Harmony Valley Farm

An update for our Community Supported Agriculture Members - Since 1993

www.harmonyvalleyfarm.com

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Adapting To Climate Change

By Andrea Yoder

We realize there are differing opinions about climate change, what is causing it, what should be done about it, etc. As we reflect upon our recent wet September and then an unseasonably warm and beautiful October and November, we (as farmers) would be foolish to ignore the fact that the climate and weather patterns are changing. While we were experiencing excessive rainfall, California and the upper northeast portions of the US experienced a drought. Since 2007 we've experienced three substantial "Hundred Year Floods," but we also had a drought year stuck in there as well. Weather patterns are becoming more extreme and erratic. Despite these changes, we all still need to eat. This means we need to figure out how to adapt to these changes so we can continue to do our job!

In June of this year, The Union of Concerned Scientists (UCS) published a document entitled, *Toward Climate Resilience: A Framework and Principles for Science-Based Adaptation*. Their framework starts with a concept they call "climate resilience gap," defined as "the scope and extent of climate change-driven conditions for which people remain unprepared, leaving them open to potentially harmful impacts." There will always be times when we are faced with weather-related situations beyond our control. Despite our best efforts we may still suffer losses and major impact. But what can we do to adapt to these changes and do our best to be prepared and decrease the impact we experience from climate-change driven conditions?

I think this is an important question for all farmers to ask themselves now. As we look at our own situation, we look for places of vulnerability in our operation. In doing so, we made a decision to stop farming one area of land we have leased for several years now. It is very prone to flooding and is not the most resilient soil. Several years ago we started leasing some new land that is "high and dry," away from rivers and streams. We have transitioned the land to certified organic and are ready to put it into full production next year. In wet years, we value land like this. On the flip side, in a drought year we can have challenges with some of our higher ground that is further away from a water source. In some cases we don't have a water source to irrigate from and in others we may not have permits to irrigate. We cannot live in fear of rivers and creeks and it isn't realistic to move our farm out of the valley. There is no perfect situation, rather we value the diversity we have with different areas we farm and do our best to mitigate risk.

Following the excessive rain this fall,

This Week's Box

CARROTS: Store carrots in a plastic bag in the refrigerator and they will keep well into winter. Add them to stews, soups and baked goods!

PARNIPS: For a new take on carrot cake go to epicurious.com and check out Parsnip Spice Cake with Ginger Cream Cheese frosting.

BEAUTY HEART RADISHES: Beauty heart radishes are great just sliced or shredded and added to salads. Beauty heart radishes are also delicious when cooked: boil or steam then mash with garlic and a bit of fresh ginger. You can even substitute them in the Turnip "Risotto" recipe featured in this week's newsletter!

CELERIAC: Check out the recipe for Carrot and Celeriac salad, the recipe can be found at food52.com. Celeriac is often eaten cooked, but don't forget it may also be eaten raw in salads and slaws!

GOLD POTATOES: This is a waxy potato variety that is a great choice for roasting, pan-frying, baking or using to make soups or stews. Store potatoes in a cool, dark place out of direct sunlight. If they start to sprout or get a little wrinkly, don't throw them out! Just trim off the sprout and use them immediately.

RED RUSSIAN GARLIC: Raw garlic adds a flavorful bite to pesto, hummus and smooth bean dips. Check out Chef Patrick DePula's (of Salvatore's Restaurant in Wisconsin) recipe Red Beet Pesto featured at ediblemadison.com. It would be the perfect dip for your next holiday gathering.

BLUSH RED ONIONS: Make sure you keep your onions away from heat and lights, and keep them stored in a cool, well-ventilated area. Cook red onions low and slow to caramelize them. You can take it a step further and turn them into a tasty red onion jam that can be spread on a sandwich.

BUTTERNUT SQUASH: Still feeling full from the turkey? Try making a batch of your favorite squash soup for a dish on the "lighter side". Add apples and/or cranberries and garnish with crispy homemade croutons.

SWEET SCARLET TURNIPS: This is the sweetest, most mild of our storage turnip varieties. If you have a hard time finding ways to use turnips, take a minute to check out the Turnip "Risotto" recipe in this week's newsletter. It has been referred to as the "Turnip Ambassador" recipe by one of our CSA members!

RED BEETS: When cooking beets it is best to boil or roast beets with the skin on and root intact to keep all the valuable nutrients in. Use the beets and garlic in the box to make the Red Beet Pesto recipe mentioned above in the garlic description.

Richard and many of the field crew took advantage of the time now available to work on some drainage improvements. In one area they rerouted the drainage ditch to take water around a field and built a nice berm to slow water down and shunt it in the right direction as it exits a culvert. We have another field that is located right along the Bad Axe River. The crew worked in this area to improve the drainage around this field so rain water can run off the field in the wheel tracks and is adequately drained away to avoid washouts and excessive wet spots. They also built a little dike! (Richard tapped into his Dutch heritage). It will give us two feet of vertical protection to hold back the river if we have another flood type event. We also have a larger field that had some wet spots and areas that just didn't drain well after it rained. In years like this where we had rainy day after rainy day, the plants didn't thrive very well in those wet, soggy areas. It took several days of intense work to get the grade of the field worked out and build some drainage ditches around the perimeter of the field, but it looks great right now and we're anxious to see how

these changes work next year!

We've also removed trees, branches and debris from the river as well as dry washes. If we don't get these things out of the way, they will build up and create dams which obstruct water from flowing where it's supposed to go and potentially can spill over into field and roadways. Management...it's constant management and observation. You don't clean or fix something up one time and assume it's good for ever. Water is powerful and changes things as it moves. You have to constantly reassess the situation each year and especially after a major event.

But what if we swing to the other end of the spectrum and have drought? One of our first defenses is to be ready to irrigate. Irrigation equipment is an expensive investment and some years it may be used minimally. In a drought year, it may be the only way we have to get even minimal amounts of water to vulnerable crops. Over the past few years we've also started burying drip tape in fields before we plant the crop. In many cases this is a more efficient way to water a crop as you lose less water to evaporation.

We realize we have a lot to learn and will continue to assess what we can do to adapt as well as what we can do to contribute in positive ways to decreasing factors contributing to climate change. This is a big topic to explore, but we all have to assume responsibility for doing our part to care for our corner of our world.

Vegetable Feature: The Many Colors of Storage Turnips

By Laurel Blomquist

At Harmony Valley Farm, we grow several different varieties of storage turnips: gold, sweet scarlet and the more common purple top. Each can add a splash of color to your seasonal store of root vegetables this winter.

Turnips have been cultivated for 4,000 years and probably originated in Middle or East Asia. There is evidence that they were grown for their seeds in India as early as the 15th century BC, and records exist of their cultivation in ancient Greece and Rome. They have served as an abundant winter crop for peasants when no other food was available, and also used as fodder for livestock during the long winter, when hay was scarce. Turnips are actually swollen stems fused with the root, and not just a root, as is commonly thought. The part that we eat is where the plant stores its energy that it would need to later produce seeds, if left to complete the full life cycle.

Gold turnips can be traced to early 19th century Scotland, and were first patented in the United States in 1855 as "Robert's Gold Ball." The Scarlet turnip was introduced to the US in the 1890s by William Henry Maule as an improvement on a variety that originated in India. Purple Top turnips were introduced from France in 1852. The part that sits atop the soil line turns purple as it is exposed to sunlight.

Storage turnips are dense and crisp with a sometimes spicy and pungent flavor when eaten raw. When they are cooked the flavor mellows and is mild and actually sweet. Gold and sweet scarlet turnips are our favorite turnips to eat as they are more mild than the traditional purple top turnip, which is the variety people are most often familiar with. Turnips harvested later in the fall after a few chilly nights are generally sweeter and have a more balanced flavor than those that are grown and harvested when it is warm or hot.

Turnips are a very versatile root vegetable and may be eaten raw or cooked, although most often they are cooked. They can be stir-fried, steamed, boiled, braised, glazed, roasted or pickled. They also add a nice background flavor to soups, stews and braised meats. Storage turnips differ from the baby white salad turnips you received earlier in the season. They are meant for long storage and will keep for months if you store them in a cold, moist environment. Keep them in your refrigerator in a plastic bag. Sometimes when they are stored for longer periods of time they will start to get soft from moisture loss, but will firm up again when placed in a bowl of cold water. You can also use softer turnips in soups and you'll never know the difference!

Turnips are high in Vitamin C, minerals and dietary fiber, and are also low in calories. As a member of the brassica family, they contain cancer-fighting phytonutrients and antioxidants, a nice benefit to add to a winter diet. So enjoy your turnips and bring some color into your life during the cold, white winter.

Moroccan Turnip and Chickpea Braise

Yield: 4 Servings

2 Tbsp olive oil	½ tsp ground cumin
1 small yellow onion, thinly sliced	¼ tsp cayenne pepper
2 carrots, peeled, halved lengthwise, and cut crosswise into ½-inch thick half-moons	1 (14-15 oz) can chickpeas, drained and rinsed
2 Tbsp tomato paste	1 cup chicken or vegetable broth
1 pound turnips, peeled and cut into ¾ inch cubes	½ tsp freshly ground black pepper
1 tsp kosher salt	½ cup chopped fresh cilantro

1. In a large, deep saucepan, heat the oil over medium heat. Add the onion and carrots and cook, stirring occasionally, for 5 minutes.
2. Add the tomato paste, turnips, salt, cumin, and cayenne pepper and stir well. Add the chickpeas and broth, raise the heat to medium-high, and bring to a boil. Turn down the heat to low, cover, and simmer for 15 to 20 minutes, until the vegetables are tender.
3. Stir in the pepper and cilantro. Serve hot.

Author's Note: "Serve this wintry braise over rice or couscous or alongside a simple main dish, like roasted chicken thighs... If you like a saucy braise, serve the dish as soon as it is ready. The turnips will absorb the liquid as the dish cools."

Recipe borrowed from Laura B. Russell's book *Brassicas: Cooking the World's Healthiest Vegetables*.

Turnip "Risotto"

This recipe for Turnip "Risotto" was shared with us recently by a CSA member named Kristin. If you are skeptical about cooking with turnips, consider what Kristin had to say: "I'm just writing to share a fantastic turnip recipe that we discovered. I've always had a hard time with turnips, never really finding a recipe that made them palatable to me (excluding salad turnips - those are delicious just as they are!). Then I came across this recipe, and it changed my whole world view on turnips. We just tried it again last night with the beauty heart radishes that were languishing in our fridge, and it was delicious with those, too. Just sharing in case you are ever on the look out for a recipe to serve as a "turnip ambassador".

Yield: 4 Servings

6 Tbsp extra-virgin olive oil	2 Tbsp unsalted butter
1 red onion, cut into ¼ inch dice	½ cup Parmigiano-Reggiano, freshly grated
1 ½ pounds turnips, cut into ½ inch dice	½ cup parsley, finely chopped
2 cup hot chicken stock	Salt and pepper, to taste

1. Warm the chicken stock in a sauce pan over medium-low heat.
2. Pour the olive oil into a large skillet and turn the heat to medium. Toss in the onion and cook until softened, about 10 minutes.
3. Add the turnips and cook for 2 minutes. Ladle in some of the hot chicken stock and cook until absorbed. Continue until all of the stock has been added, about 10 minutes.
4. Season with salt and pepper. Add the butter and grated cheese stir occasionally for a minute. Remove from the heat, garnish with parsley, and serve.

This recipe was featured on seriouseats.com, but Mario Batali is the original chef who created this recipe.