

## Coming Home

By John

It was nice to come home after an emotionally grueling weekend away preceded by a physically grueling week allowing us to leave for a few days. It isn't usual for us both to be away from the farm at the same time for more than 12 hours or so. That makes 3 nights a bit nerve wracking. Farmers get nervous when they leave their farm for any period of time. Did the seedlings dry out? What about the transplants? Are the chickens OK? Did the dog get himself in trouble? Are the flea beetles all over the arugula and other brassicas that were left uncovered? It is easy to expect the worst, particularly if you are already on edge. As it turns out the farm didn't need us that bad and we left it in good hands. Julio kept the dog happy and the chickens full, Mike and Susan got our CSA boxes out and staffed the farmers market, Allen kept our plants watered and Linda got us to and from the airport with no hang-ups. It can actually be nice to step away for a little while and then step back in. It helps provide some perspective and in this case optimism moving into the fall. There will be a lot going on in the coming week or two. We will begin with our fall compost application to our fields just before working them a final time and putting them to rest for the year with a winter/spring cover crop. The fields that we need earlier in the year will receive singly or in combination, buckwheat, oats or barley. These crops will 'winter kill' or be killed by the cold, forming a nice protective mat over the soil to see it through the winter and spring. When it is ready to be plowed in it can generally be worked in relatively easily and can be transplanted into (broccoli, bok choy, cabbage etc.) almost immediately or directed seeded (lettuce, radishes, raab etc.) within 10-14 days. For soil that won't come into production until later in the spring or summer we will plant cover crops that will survive the winter like rye and vetch, singly or in combination. Vetch is a legume, like peas, beans, clovers, alfalfa and locust. Legumes are unique in that they are able form symbiotic relationships with soil microorganisms and pull or 'fix' atmospheric nitrogen from the air and put into their plant tissue and ultimately the soil. When the crop is plowed in it will provide natural nitrogen fertilizer and organic matter for the next cash crop. Rye is a staple cover crop in that it can be sown late into the year and still grows, providing winter and spring cover. On early ground it can be worked in small or in the 'pre-boot stage'. On slightly later ground it can be plowed down in the 'boot

### WHATS ON DECK

Sweet corn, melons, cukes, zucchini and summer squash will all bid adieu this week until next summer. You can expect summer flavors from tomatoes, peppers, eggplant and green beans. We will reprise the spring with turnips or radishes. It will start to feel more like fall with kale, onions, garlic potatoes and winter squash. The salad greens should be plentiful with moderate weather.

stage', which describes the time period just prior to forming a seed head, but the plant has taken energy from leaf and stem growth and siphoned it to flower production. This is a good time to take the crop down because the plant tissue is soft and will break down with relative ease along with the roots but it will add considerable organic matter to the soil. Sometime we take down rye in the 'milk stage', which is when it is forming seeds, but they are not yet mature. Dealing with milk stage rye requires good planning as it can cut with both sides of the blade. Mature rye forms lignin which is a secondary cell wall surrounding the soft cellulosic tissue underneath (think wood). The specific pathways for lignin decomposition are not well understood but the outcome is. Specific soil microorganisms will decompose lignins through enzymatic hydrolysis; a process where enzymes with help from a catalyst use water to break apart a molecule in order to free the atoms it wants. At the end of the line we are left with humic and fulvic acids which are critical components in humus production. If you have ever been in the forest, swept aside some leaves and dug into the soil a little, you were likely holding pure humus. It is a stable form of organic matter; actually it's not really organic matter at all. Organic matter is plant and/or animal tissue that is in the process of decomposition. Humus is what you have when the organic matter has finished decomposing. Humus production should be a critical goal of any serious earthly steward. When soil has humus, it will have better water retention when dry and drainage when wet. It will help break up clay particles improving tilth, root zone and drainage. It will also greatly improve the colloidal capacity of the soil, think of it as a storage unit for minerals that are easily found by plants and soil microorganisms. It will buffer against other minerals like magnesium and potassium, which are often found at excessive concentrations in the soil, preventing the plant from getting other minerals it needs.

On the other hand you can create problems for yourself with mature rye, or any grass or cereal grain you use as a cover. If it gets too mature it will produce viable seed creating weed problems down the road. The greater concern though is the timing. Lignin breakdown takes time and you must consider that a mature plant has an immense root system beneath. You will not be able to plant into this soil for several weeks after plow down. It will take time for this much organic matter to breakdown, and while the soil microorganisms are busy working on the rye they will be by tying up vital nutrients effectively starving any cash crop planted too soon afterwards. Another issue is that the rye will leave large clumps that are impossible to seed into not to mention the allelopathic effect of rye. Rye can also be very difficult to kill in a wet spring (like this one, 4-6 weeks) that can keep you from planting when you need to plant. Considering all of this is why we always leave a little ground open. We don't like leaving exposed soil in the winter but it is prudent when you need to seed parsnips, carrots, radishes and other early crops in March, when bare ground can be hard enough to work without having to think about cover crop residue management. Fall is also (as you can tell) farm geek time. We need to be thinking about next year and planning well in advance of the end of the season. For any organic farm to be successful and sustainable we have to always be thinking about our soil first and foremost which the summer frenzy doesn't always allow.



Fall Crops Looking Good

## News and Notes

- Don't forget about the barbeque at the farm on Sunday the 18<sup>th</sup>. Please RSVP by September 14<sup>th</sup> if you can come.
- Volunteer photographer wanted; we would like to get some more pictures of the farm as the season closes. If you are interested let us know.
- We still have some chickens available for order. Ask for an order from or find one at [www.fazendaboterra.com](http://www.fazendaboterra.com)
- Canning and freezing season is here, be on the lookout for tips and recipes on our Facebook page.

## Featured Item

All Blue potatoes are it for this week.

Harvested early these potatoes are small and tender though they are some of our best storage potatoes. Perfect for boiling, mashing, roasting or homemade chips. With unique appearance and phenomenal flavor they have all the markings of a great heirloom. Keep in a bag in your crisper or root cellar.

## Recipe of the Week

### Herbed Potato Salad with Greens Beans and Tomatoes

- 2 1/2 pounds small potatoes, quartered
- 2 cups green beans cut into 2 inch pieces (about 1/2 pound)
- 1 cup chopped fresh basil
- 1/2 cup thinly sliced and chopped onions
- 1/4 cup white wine vinegar
- 1 tablespoon olive oil
- 2 teaspoons Dijon mustard
- 1/2 teaspoon salt
- 1/2 teaspoon black pepper
- 3 garlic cloves, crushed
- 2 cups tomato, seeded and diced

### PREPARATION

- Place potatoes in a Dutch oven; cover with water. Bring to a boil; cook 10 minutes. Add beans, and cook 3 minutes or until tender. Drain.
- Combine basil and next 7 ingredients (basil through garlic) in a large bowl. Add potato mixture; toss well.
- Add tomato, and toss gently.
- Cover and chill.