

Fair Fields News

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On the Farm

Although the day began with rain and the forecast was for thunderstorms in the afternoon, the sun came out in time for Saturday's CSA potluck. We had a great time with many CSA members as well as family and friends. Thanks to all who came out!

Long term weather forecasts indicate we are likely to get some above seasonal temperatures during the last third of this month. We are keeping our fingers crossed that this heat materializes and continues into September, so that we can give more hot crops. By this time last year we had already given eggplants and were harvesting many more tomatoes and peppers.

Our garlic is cured at this point, so you can store it the way you normally would, in a dark cool dry spot. The quality and quantity are both the highest we have ever had, so we will be selling some garlic at the end of the season.

We gave celery last week. In past years we have often given it a bit later in the season, however, we noticed it was starting to get a bit of damage on the stems and crown so we decided to harvest it small before the damage progressed any further. Last year we left our harvest too late and were unable to give celery at all. We suspect the damage is from the Lygus bug, or tarnished plant bug, a pest of many of our crops. This is the same pest that destroyed our strawberry crop two years ago.

We hope to start finding time for cutting firewood soon. Last fall we had a great supply of firewood for heating the greenhouse, however, we started using a woodstove for heating our house and quickly burned through the pile (pardon the pun...). We hope to get ahead of the game this fall so we can start burning our own firewood again in the winter and spring of 2019.

The raspberries are looking good. We will likely start giving them in the last week

of August and for several weeks thereafter. We anticipate having enough to open up for U-pick, both for the CSA and other customers. Next newsletter we will send out information on pricing (for non-CSA customers) and picking days and times.

We are unsure of whether or not to harvest our oats. Initially we had hoped to have horses by now and were growing the oats as feed for them. With the price overrun on the barn foundation we still have not finished their housing, let alone purchased a team of horses, so we are contemplating simply mowing the oats down and treating them as a cover crop. If our neighbour, or other farmers in the area are interested in combining them for us and splitting the harvest, we may still do that. We shall see...

Harvesting

- **Beets**
- **Beans**
- **Carrots**
- **Eggplant**
- **Chard**
- **Garlic**
- **Herbs**
- **Kale**
- **Lettuce**
- **Leeks**
- **Melons**
- **Onions**
- **Peppers**
- **Tomatoes**
- **Zucchini**

Melons in a cold year...

Melons are often a challenge for us, as we are on the northern limit of successful outdoor production. There have been good melon years and bad ones, when they never consistently matured for us. We suspect this year will be the latter...

To try to get good melons we start them early in the

greenhouse, plant them into black plastic mulch and cover them with hoops and row cover. The black plastic mulch helps heat the soil below it and the row cover over hoops helps create a breathable greenhouse to heat the air around them. Despite these techniques, cold years still make it quite a challenge for us.

There are times we think we shouldn't be growing melons at all.

Then we get a good year and enjoy the delicious fruits and our desire and confidence is renewed. One of the silver linings of climate change is that with warmer summers our luck with melons will



likely increase. Not good to bank on global warming, though...

Please bear with us as we figure out our approach and continue to attempt to grow this wonderful fruit!

Fertility Management

We just got our manure compost for next year and I thought it would be a good time to talk about fertility management on our farm. Manure compost, — animal manure that has been thoroughly decomposed — is probably our single biggest and most diverse source of fertility.

This year we purchased a manure compost made up of turkey litter mixed with spent mushroom compost, gypsum and lime. In the photo below you can see the rich compost with little chunks of gypsum and lime in it. Poultry manure can be very high in fertility. Mixing in spent mushroom compost helps balance the finished compost, making it less 'rich' and increasing the 'fungal dominance,' important for healthy soils.

In previous years we have spread compost in the early spring before plant-

Cover crops not only help hold and cycle fertility, but can also add to it. Some cover crops we grow, like peas and clover can 'fix' nitrogen into the soil right out of the air. They form symbiotic relationships with types of bacteria. The plants provide sugars to the bacteria, which live in nodules on the roots. In exchange the bacteria fix nitrogen and share it with the plant.

Other cover crops help make nutrients already in the soil more bio-available, or easier to access by plants. Some nutrients may be found in the soil, but may be so tightly bound up with other minerals that the plants can't access them. This is especially true of phosphorus. We plant oats and buckwheat as they are supposed to help make phosphorus more bio-available.

Cover crops, like compost, also add organic matter to the soil. Organic

In past years we have also used mineral rock fertilizers to address nutrient imbalances in our soil. We have low phosphorus, calcium, potassium and sulphur. The gypsum and lime in our manure compost will help bring up our calcium and sulphur levels. We also have low copper, zinc and boron, but are waiting to address these till we deal with the others.

We have mixed feelings about mineral fertilizers. They take less energy, produce less waste and are slower release than synthetic fertilizers, which means nutrients have time to be absorbed by plants and soil life instead of leaching away. On the other hand, mineral fertilizers are mined and mining is one of the most destructive resource extraction activities. Though allowed by organic standards, we try to limit our use of mineral fertilizers for this reason, only using it to correct major nutrient imbalances or deficiencies. This is made easy by the fact that they are very expensive!

Liquid fertilizers are our last main source of fertility. These have the advantage of being immediately available to plants and easy to apply to already growing crops. We use liquid fertilizers on seedling trays when they run out of soil nutrition, in foliar sprays for our orchard and on garden crops that we suspect are suffering from low fertility. The liquid fertilizers we use are fish emulsion, kelp extract and molasses. Fish emulsion is a good source of nitrogen and phosphorus, as well as a host of other nutrients, enzymes and fatty acids. Kelp is a great source of micro-nutrients, such as copper and zinc, as well as natural plant hormones. Molasses provides many vitamins and minerals, as well as an immediate energy source for plants.

Our fertility management system is still evolving and we look forward to exploring various other methods in the future.



ing, however, this is always challenging as we are always in a rush to get our first plantings in. This year we will spread our compost before planting our fall cover crop, oats and peas. The oats and peas will take up the leachable nutrients in the compost, die over winter and slowly release them into the soil as they decompose next spring.

matter, plant and animal material at various stages of decomposition, is important for soil structure, storing nutrients and water, and releasing nutrients as it slowly decomposes. In organic farming, getting your organic matter levels up is of utmost importance and a good gauge of how well your cover cropping and fertility management systems are doing.