

August 2012

When the heat and dry weather's impact on agriculture hits the mainstream news, you know it is serious. We are fairing pretty well considering. We have been irrigating every day since mid June. Our irrigation system consists of a gas powered pump at the creek that runs through the back of our farm. Water is pumped through a 2 inch hose up to the garden areas where we have faucets going to some sprinkler tripods and some drip hoses. We are able to water about a sixth of the garden crops each day, so every day we move the sprinklers to a new location in the morning and by 2pm turn on the pump. We leave the pump running for about 6 hours, delivering about an inch of water to these crops. By the end of the week all the garden is watered, and then we start over again. We have been timing our cultivations to be shortly after the crop is watered to help hold the moisture in. With the extreme heat, this has really helped maintain ground moisture. But it is really dry. We finally got 2 inches of rain the last week in July, which would usually mean no irrigating for at least a week. But the ground sucked everything up so fast that we started irrigating again three days later, since everything would have needed water by the end of the next week, and it takes a week to get water to everything.

Because of our ability to irrigate, the garden crops are doing quite well. What is more a cause of concern to me in the garden is the insect activity. The two bugs we have yearly trouble with are the cucumber beetle – affecting everything in the cucumber family (cucumbers, squash, zucchini, melons), and the flea beetle – affecting everything in the brassica family (cabbage, kale, brussel's sprouts, rutabaga, kohlrabi, mustard greens...). These insects are in much greater numbers this year. This is likely due to the more mild winter and hot dry spring, and they are always more active in the hot summer months. Usually, we cover these crops with row cover until they are big enough to stand the damage of the insects. This year, with just the overwhelming numbers, the plants are having a hard time keeping up. The zucchini are noticeably set back, with some of the leaves just skeletonized, where usually the damage would be minimal. The cucumbers have also succumbed to an early demise, due to the spread of a plant disease called bacterial wilt that the cucumber beetles carry. The fall squash and pumpkins seem less affected, so we can hope for a fair harvest. The fall brassicas are getting devoured by the flea beetle. Usually as the weather cools down in September, the beetles disappear for the year, and the crops recover... we can hope this will happen as normal.

The drought's biggest impact on the farm is in the hay and pasture. We cannot irrigate all these fields. I'm grateful that I decided to shrink the cattle herd last year. This will probably have saved the farm. So the demands on the pastures are much lower. The fields I cut for hay yielded about a quarter of what they normally would have. I decided to not cut a couple of fields, and allow the animals to graze them. This has meant there has been enough for them to eat during the summer months. Hay will be hard to find and very expensive this year, so even with cutting back the herd, I think I will have to butcher one extra animal this fall to have enough food for them. I usually buy some hay, and cutting back on the herd was supposed to let me be more self sufficient with hay, but I have purchased about the same amount as other years to compensate for our lack of production this year.

This has got me thinking about sustainability. One of the central concepts on Biodynamics is that a farm is healthiest if it can provide for itself all it needs for agricultural production. This

means having the right numbers and kinds of animals for the fertility needs, and the right kind and amount of feed for the animals. Any fertility that is brought onto the farm from outside can be considered a remedy for a sick farm. This is much like our blood circulation. Yes, there can be times when we might need a transfusion, but an annual one would mean something is seriously wrong. Finding this balance is more complex than may at first seem. What makes it more complex is the need for the farm to produce something for the community... the economic picture. Allowing the land to just do what it will do, encourages it to be an ecosystem, but not a farm. What gives birth to a farm out of the womb of the Earth, is this fertility management. This separates it in a certain way from the given environment, and puts more of a responsibility towards its sustainability on the people involved, particularly the farmers. I think our current culturally economic reality puts quite a bit of stress on this sustainability. Each farm is pushed to produce its maximum every year. This is an extreme year, but that may become the normal. We are having one of the driest years in over fifty years, and in England they are having one of the wettest in a century. They are having a hard time getting hay because it is rotting on the ground!