

Farm Management Update

Jason Bradford, October 6, 2011

The main growing season really flew by this year, which is what it feels like when each week is packed with activities. I'll make this review semi-chronological starting in April.

April

This is the month when the grass grows incredibly fast. About 500 pregnant ewes arrived and for the next month they gave birth at Fern Rd Farm. A mothers' behavior changes when going into labor and for a few days after birth. Instead of wanting to stick with the rest of the flock a ewe tends to go off on her own and lay low in the grass. Moms and babies need a couple of days in semi-private to bond and learn each other's distinctive call. And while the lambs are standing within a couple hours after birth, it may take them a few days to be highly mobile.

Baby lambs are extremely cute, of course, and also very playful. After a couple of weeks they can run much faster than I can, and it was a hilarious to watch groups of them sprint back and forth across fields as if they were competing in a 100 yard dash.



The other big event in April was the purchase of our second property in Oregon. It is only a few miles by road from Fern Rd Farm and even closer to downtown Corvallis. I'll have more to say about that place in September.

May

Peter Donovan of the [Soil Carbon Coalition](#) sampled at Fern Rd Farm on May 3. Pictured to the right is a plug of soil of known volume that is used to measure bulk density. We are partnering with Peter to make repeated samples of the soils we manage to track long-term changes in key attributes, such as soil carbon.

If you care to browse Peter's web site, the data from this sample are available under the ID heading "FR."



A headline quantity inferred from the samples is that the soil stores about 114 metric tons of carbon per hectare in the top 40 cm. We believe we can increase this rapidly with our management practices and Peter will be able to tell us if we did so and by how much.



The pasture continues to grow riotously with crimson clover, pictured on the left, being the standout for the month. Though we diversify and design our pasture mix to more evenly distribute productivity throughout the seasons, it is always fascinating to watch the vegetation shift as one species hits its peak of productivity and declines, and another species takes its place about a month later.

June

This was another wet spring and it kept raining well into June, which was great for us since there were equipment delays on our well pump. To keep tabs on soil moisture I buried two sets of tensiometers, which are small devices placed in the soil. At each location I placed a sensor at depths of 24 inches and 8 inches. They are very useful for managing irrigation, something I'll discuss in a future blog post.

I enjoyed co-instructing a week-long summer course through Oregon State University, something I [promoted a bit](#) before it began. I'd say the highlight for me was visiting Kenagy Farm near Albany. This is the only place I've been that has very mature hedgerows integrated beautifully with center pivot irrigation systems. The farm not only makes income from typical seed crops, but combines native seed production with agroforestry. In the picture below the class is standing at the boundary between a field, hedgerow and a managed forest with native plants in the understory.



July

Farmland LP is keen on developing pastured-poultry on our properties. Poultry add fertility and clean fields of sheep and cattle parasites. A key feature of a good pastured-poultry system is mobility. In general, the more frequently the housing can move, the better off the land will be. But moving housing, feed and water equipment for hundreds or thousands of birds with ease is a design challenge that isn't perfected.

Chris Hansen has a small laying hen operation at Fern Rd Farm. As the land manager, I wanted to study how the hens used the facility, where most of the manure was deposited, and how the residency time in a location affected pasture regrowth.

We were contacted by an executive of a large, successful poultry business in France regarding an internship for his college student son, Pierre Vaugarny. Pierre wanted to spend a summer in America and get some experience on a farm. This became a perfect opportunity for him, as well as a way for me



to practice my high school French. One of Pierre's projects was to follow the laying houses as they moved, and flag and photo document the changes in the ground cover as the hens passed over a location. The markers are still in the field and I can go back and see if there are any differences in the pasture regrowth that correspond to the number of days spent in one place.

Above is a picture of Pierre getting to know the chickens.

Pigs were in the spotlight in July. There's a movement among some chefs to celebrate cuisine that features heritage breed hogs. Chris Hansen has raised a few hundred hogs at Fern Rd Farm and has had the pleasure of choosing two for the "Cochon 555" competitions ("five chefs, five pigs, five wine makers"). These culinary competitions help to promote sustainable farming of heritage breed pigs. In February, he traveled to the regional competition in Seattle, and was honored to have his pig entered in the annual [All-Star Cochon](#) on July 24 in Las Vegas. Chris' pig was of course paired with Portland chef Andy Ricker, one of only ten chefs around the nation



to be deemed a Cochon All-Star. Way to go Chris!

One secret to Chris' success could be his special feed blend. He sources ingredients mainly from local farmers to create a nutritionally balanced and distinctive feed. Plus, the pigs get to eat plenty of salad...and have a truly good life out on our pasture.



August

The word of this month is **infrastructure**. After much delay our new well pump and controller were fully installed. We had been using a temporary pump since early July to get by as the arrival of parts for our own pump was mysteriously delayed. It finally all came together in the middle of August. The controller automatically adjusts the power supply to maintain a constant pressure in the system and a simple knob timer conveniently shuts off the system—much better than scheduling one's life around 12 hour irrigation sets.



The other big improvement was the upgrade of our main farm road. Pepper Construction accomplished an awesome amount of work over two days with grading, laser leveling and rock spreading. In the picture above, the edge of the gravel road is visible against the well.

With the new road, I am almost looking forward to the soggyiness of winter. But perhaps we will miss the thrill of getting a truck stuck in mud and being rescued by a 4wd tractor?



By the end of August I had made repeated pasture samples from a few locations around the farm, one of which is shown on the left. The purpose is to measure the standing biomass before grazing and to see how well the pasture recovers between grazing. I will report on the details in a future blog post.

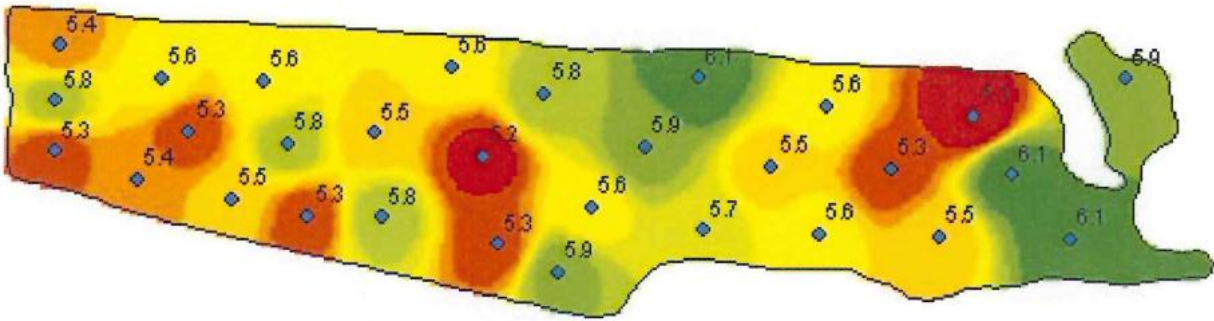
On average, pasture biomass was about 3300 lbs of dry matter per acre, with higher values in the spring and lower values by late summer. What this means practically is that about 2000-2500 lbs of dry matter is available for the animals per acre. And since a ewe with lamb(s) will tend to eat about 7 lbs of dry matter per day, each acre can support about 290-360 ewes plus their lambs each day. Cody stocked about 500 ewes at Fern Rd Farm and the paddock size was typically about three acres. This meant that the flock was able to reside in a paddock for about one and a half to two days, on average.

September

Our Wattenpaugh Ave property is keeping me busy this month. Coordination needs to occur among numerous contractors to perform soil tests, repair and install equipment, apply lime and fertilizers, till fields and sow seeds. We are fortunate to have great neighbors to work with and are collaborating with them on a few projects related to road and drainage improvements. To our south is a field leased by [Stahlbush Island Farms](#) and to our north is [Afton Field Farm](#).

To give you an idea of what goes on, I include a map of the soil pH below. Appropriate soil pH is essential for ensuring that proper nutrients are available for crops. When we bought it, the pH range was from 5.1 to 6.1, and our goal is to have a minimum pH of 5.8. Included in the soil tests is something

called “buffer pH” and it tells us how much lime is required to move the soil pH upwards. Some soils change pH easily while others are more difficult to change. By putting together the actual pH, the buffer pH and a target pH the total amount of lime needed for a field can be calculated. Our field needed 100 tons of lime, or a bit over 1 ton per acre. However, the distribution of the lime will vary greatly. None will go in parts that are above pH 5.8 and more will go where the pH is lowest and the buffer score is low too. 100 tons of lime is about 4 truckloads and costs \$65 per ton to apply.



Looking Ahead

If you have been following the Farmland LP blog for the past couple of years Cody Wood may be a familiar name by now. He has produced lamb on our land, and it has been a great pleasure to get to know him personally. Cody has put in a great deal of work improving the basic infrastructure of Fern Rd Farm, especially getting the wheel lines in shape this year.

Well, Cody is leaving Oregon for a while this November. He is going to New Zealand—which for a lamb

producer is akin to a young actor going to Broadway. I am excited about what he will learn and bring back to Oregon and expect to take him out for lunch at Gathering Together Farm or beers at Block 15 (whichever he decides, maybe both) soon after his return so I can



scan his brain for novel insights.

Meanwhile, Farmland LP has established relationships with sheep experts John Neumeister and Mac Stewart (pictured above). John co-wrote the National Organic Standards for livestock, worked as a research agronomist and for a major seed company, and for the past couple of decades has developed his main business, [Cattail Creek Lamb](#). Cattail Creek distributes premium lamb to the top restaurants and butchers up and down the West coast. When John saw our pasture management practices at a farm tour earlier this year, he gave us a purchase order for 1,000 lamb (twice our current production), with a desire to expand to 2,000 lambs. Those ewes will have to get busy...

Mac grew up on an Oregon sheep ranch, earned a B.S. in Animal Science, recently managed a large commercial blueberry farm, and is very excited about devoting his full time to building a fantastic sheep business based on high quality pasture management.

In my immediate future is making sure we get a lot of important work done in October. This includes picking up 5000 lbs of custom pasture seed mixes we have ordered, and getting the needed equipment with the right seeds on the right farmland at the right time. This is where spreadsheets and plans meet nature. We will probably get it done, and get it done well, but until everything is planted, and it is too wet to do anymore field work, we will be in a state of tension and anticipation, making plans, doing what we can, and adjusting as circumstances require.

I leave you with a final picture that got me thinking. I saw this line in the sky one brilliant summer afternoon while moving a wheel line. It seemed to fit what Farmland LP is about.

Our society has spent a lot of energy going in one particular direction for a long time, and this movement has tremendous momentum behind it—so much so, that one wonders if there is enough time and energy available to turn things around. Well what that

plane did gave me a chuckle and a bit of hope. I have serious concerns about the state of our economy, our food system, and the broader environment, but I am not paralyzed by the scale of the issues. The fall planting season is what there is for us to do right here, right now. And in doing so, each season, we are putting our energy towards what society needs to make that turn.

