



PRINCE WILLIAM
Soil and Water
Conservation
DISTRICT

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Notes from the field – Fall 2009

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Fall 2009

The northern pastures had been over grazed severely. The worst of this occurred when we began the spring renovation of the southern, streamside pastures at the end of March. From that time forward, the southern pastures were on complete and absolute rest and continued to rest and grow for about 4 months. During this time the four horses on the farm were rotated between their sacrifice areas and northern pastures that were now finally going to be renovated.

These pastures were compacted, weedy, and had very little desirable forages growing in them. As a contrast to the southern pastures we decided to include the use of an herbicide in the renovation process. The use of herbicide to either selectively or non-selectively kill the existing vegetation is an important consideration. A selective herbicide can be used to only kill broadleaf weeds/plants. A non-selective herbicide like Roundup kills all the vegetation. Clover is a broadleaf plant so either herbicide will kill the clover.

We developed our renovation plan with [Southern States Cooperative, Inc.](#) working directly with Marcus McDonald the Assistant Manager of the Calverton store. Southern States agreed to join the project as an additional partner sharing expertise and products. On September 16th the northern pastures were sprayed with Roundup to kill all the existing vegetation.

The next step in the plan was to possibly make a second application of the herbicide in about 10 days or to go ahead with the seeding. Over the next couple of weeks we had very little rain. In order for the herbicide to be effective you need to have actively growing vegetation to absorb the herbicide into the system of the plant. Without rain the plants weren't very active. The Roundup seemed to have some effect on the vegetation and the decision made against another application.



Now it was time to apply the lime and fertilizer according to the soil test results. This was done by Southern States on October 8th. The next day Jay and Jim Yankey of [Yankey Farm Service](#), also grant partners, arrived to apply the [Select Tall Fescue](#) provided by Southern States. The Select Tall Fescue is an alternative to Kentucky 31 Tall Fescue. Select has less than 5% of the endophyte that the KY31 contains. This endophyte is problematic for broodmares. I'm anxious to see how the Select Tall Fescue performs compared to traditional KY31 which I often suggest for use on small-acreage horse farms that don't breed their horses.



Select Tall is safe for broodmares



Smoothing and seeding the pasture

If you will recall, we applied our spring seed mixture using a no-till drill which is able to place the seeds directly into the soil through small silts with minimal disturbance to the surface. We planned to use the no-till drill again for the fall seeding but the ground was just too hard—compacted and dry from lack of rain. After a couple of failed attempts at getting the no-till drill to cut the hard soil, Jay Yankey

suggested that we lightly disk the soil instead. The seed would be laid into the loose soil to ensure the necessary seed-to-soil contact for germination. A light disking is sometimes also suggested as a method of weed control during a complete pasture renovation though I've also heard the process can actually “stir-up” dormant weed seeds in the soil and bring them to life. We decided to try the disking approach and again will be able to compare this to the alternative approach taken with our spring seeding.

After the pasture was sprayed, limed, fertilized, and seeded on October 10th it was time to wait. The fall weather so far has been great for growing pasture.

The photos below show the progressive growth about 30 and 60 days after seeding. The pastures will be rested for at least 90-120 days, and likely that will be extended until spring.



Lightly disking the top 3-4 inches of soil



Approximately 30 days after seeding



Approximately 60 days after seeding

See next report - December 2009 snow update