

July 2010

Pasture News

LaGrange County Soil & Water Conservation District
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Next Pasture Walk to be Held at Phillip Whetstone's:

When: Thursday, August 12th @ 1:00 p.m.
Where: 63586 CR 35, Goshen, IN

Visit the Whetstone Elkhart County dairy operation in late summer.
Call the office at 463-3471 ext 3 if you need transportation.

July 8, 2010

About 30 farm producers plus some agency staff gathered on Ray Yoder's farm in western LaGrange County on a typical summer day. After all of the spring rains, the weather had turned dry and hot, but there was a shower in the morning which will help green things up.

Martin Franke from the SWCD started the program by introducing LaGrange County's new NRCS district conservationist, Derek Thompson, to the group. Derek has been in the LaGrange office for about three weeks and will be available to help producers with various conservation programs. Martin reminded everyone of the post pounder and stated that it is available to rent beginning the end of next week. Larry Yoder with Townline Seed asked Martin to invite everyone to attend a field day on Thursday, August 19 beginning at 9:30 a.m. on his farm. Honeyville Feed is extending their No-Fly promotion until July 16 and if anyone orders today they will get an additional \$2.00 off. They also have a high boy seeder available. Representatives from Natural Way Feeds were in attendance at this pasture walk. The local representative is Orla Eash with the company located in Claire, Michigan. Their products have received organic approval. Martin welcomed all of the company representatives to the pasture walk, including one from Organic Valley. Martin then turned the program over to Ray.

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The Yoder farm consists of 90 tillable acres with 40-50 acres of grass, 20-25 acres of alfalfa and 10 acres of corn on an average each year. Ray and his wife Marilyn have 6 children, 3 boys and 3 girls, ages 2-13. They milk around 42 Jersey-cross cows, and maintain an equal number of young stock on the farm as well. Ray has managed his farm as a management intensive rotational grazing operation for about 7 years. His goal is to be sustainable, but in order to keep paying taxes he has to make money; sustainability, however, not profit, is his number one priority. He always sets his goals a little high. Ray says if you don't strive to improve, you will go backwards instead.

As we walked to tour the fields, Ray pointed out an old shed located along the farm lane. Years ago, this building served as a farrowing house. Ray currently uses it to house his calves. To maintain animal health, he keeps the doors and windows open in all but the coldest winter weather to maintain plenty of ventilation and prevent the building from housing disease organisms.

Field #2 was plowed late and planted to Blackhawk 12 VMR which is an organic approved Sudan. He got the seed from Larry Yoder. Ray wants to get organic seed in the ground, so he hopes he likes this variety. The growth in this field stood about 3" high the day of the walk.

Field #3 was seeded in 2005 with Organic Star, orchard grass, rye grass, clover and chicory. He has tried to get a stand of brome, but he can't seem to get it started. He likes brome, but doesn't know how to get it going. Lavern Bontrager suggested using a drill, which is how Ray planted it this time. Pete Lehman noted that brome is a bigger seed and needs to be buried a little deeper. He planted Verblanka (?) clover with the Brome in 2009, but the clover took over. Ray no-tilled festolium into what was there and he likes that better. The cows eat the Brome better than orchard grass and fescue. His cows give a lot of milk when they graze in this field. There was some rust burn apparent on the leaves, which John Belork commented was probably caused by a sulfur deficiency. Ray admits he does not keep up with the micronutrients in his fertility program as well as he should.

Ray likes to have the fields in more of a square shape, with narrower fields, about 20 rods wide. This area used to be one field, but he moved the fences and it works better for him. The temporary electric fence wires have been a problem with the horses, the first time through, but after they get used to them it seems to work OK. He has an opening in the fence half way back in the field with temporary fencing along the lanes. The waterlines run from the road all the way to the back of the farm. The waterlines are not buried. The calves will have a tendency to walk right over the wire at first, but once they are used to it, this isn't a problem. He usually starts the calves up at the barn and then when they are weaned, he switches them between two paddocks during the summer which he rotates every two weeks. If there is not enough feed, they will moved them to another field, but he tries to keep them in one.



Ray's farm is split by a road. There is a hog tunnel – built in 1906 - which runs under the road and was used to move the hogs from one field to another for them to graze. Ray ran his waterlines and insulated fence wire through this tunnel. There is a switch near the road that shuts off all the electric fence lines going to the other side of the road.

Field #6 was reseeded in the fall of 2007 with DairyMaster, chicory and clover. He likes a little chicory in all of his fields. It will survive well for about 4 years, fading a little each year. He took a chance planting the rye grass in the lighter soils in this field. Rye grass needs a lot of fertility and moisture to keep it going and will shut down quickly without water and sun. He used the AgriEnergy fertility program on this field. It was clipped and baled, yielding about 1 round bale per acre, then grazed. He hopes to be able to graze it 4 more times this summer. Ray rotates the cows through a faster rotation, which keeps their milk production up and helps with paddock forage recovery. He doesn't let the animals eat the forage way down and will clip rather than make them eat it. To graze here he starts out by the road and lets them have 30-40 steps for 2-1/2 to 3 days. He has a wire spool on the end of the fence away from the road. It is easier to move and saves a lot of walking when moving the fence. They will graze the full length and then moves to the next gate. There are 2 openings, with the field divided into three sections. He always grazes the horses after the cows at night. Horses work better during the day, if they have grazed at night.

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Field # 5 was seeded in 2004 and he has mixed feelings about what to do with it. It seems to get better each year with more red clover, fescue and orchard grass. He applied dry duck manure this spring and used Agri-Energy's dry program last fall. It has been very well. He would like to plow it down to plant something different, but it is currently too productive to sacrifice. He got a lot of hay from his first cutting, but the forage was so thick it mowed hard. It has been grazed once and he is grazing it the second time now. Over the years it has maintained better growth if grazed taller. He started out with 30 steps a day, but is now up to 50. He will graze it 8-10" higher and the horses will be able to graze here until January. If it gets dry, this field will continue to grow better.

Field 7 was in corn last year with 4 acres of Sudan. It was disked in the fall and he drilled in rye grass as a cover crop. He will probably do that again, if he doesn't seed turnips. He drilled 14# of alfalfa, 10# OG 24 & MOI ryegrass, 10# Neva orchard grass and 10# of clover. He wants grass, so he always seeds plenty. A discussion followed on the best way to plant to get a good stand. Seed bed preparation is more important than depth. With a lighter soil more packing is needed in order to make good contact with the soil. Depending on soil type, you may need to drill a little deeper. Using oats may help since the deeper roots system of oats brings up the potassium and phosphorus up to the surface where it is available to the grasses. There is a theory that if you even put a small seed with the oats they will all grow. MOI is an annual and will head out very quickly. It was recommended using it as a cover crop.

Field # 8 is in corn, which two varieties planted - Masters Choice and _____. Ray had turnips here in the spring, then he no-tilled oats and peas into it in March. It might have been better if he used the big drill, but Ray likes to use 2 or 4 horses and you need 6 to pull the bigger drill. The corn has been cultivated twice and they will probably cultivate one more time.

The lane that divides the fields used to be about 2 feet lower and never had any gravel in it. It used to drift full of snow badly in the winter. He keeps the heifers back here all winter. Several years ago when the county was berming the roads, he had them haul the berm dirt back here and spread it in the lane. He evened it out and disked it several times and has also graded it. Now it has a good base and does not have all the mud. It makes it easier to get through in the winter.

Ray had some pink eye problems with some of his cows this spring. ORFA approved an adhesive for applying a patch over the eye, which he made out of pieces of dark cloth. This method of treatment clears the problem up in a couple of weeks.

Field #9 was planted in the fall of 2006 with

16# of alfalfa and 16# Alfalfa Mate (timothy, brome, orchard grass). He applied 6 tons per acre of duck manure. There is not much grass left here now. There is a little heavier soil in part of this field, which might contribute to part of the problem. He got very little hay off of this field the first year it was planted. The soil tests show it is low in potassium and phosphorus, which could be a result partially of the dry duck manure. He applied liquid duck manure, which gave it a boost, and AgriEnergy's dry treatment. Every fall and winter he applies dry duck manure. He is trying to get some chicken manure, but it is harder to get. The barn is ½ mile away from this field, so it does not get as much liquid manure as other fields. It was recommended making an effort to get some liquid cow manure applied here. Every fall Ray applies dry duck manure, which has a lot of saw dust in it. The pH is pretty good and calcium levels are ok. Ray is watching his soil tests. Ray has problems keeping grass growing well here, and he thinks this must stem from a fertility problem. The grass germinates, but it does not stay long-term.

Field #10 is where he pastures his dry cows and heifers through part of the winter and then again in spring. This field is good dry cow feed, but not for production with the dairy cows. He keeps kelp and salt for the dry cows. He baled the first cutting and he let grow until about a week ago. This field has been in pasture 15 years or more. The soil is tight and would need to be renovated before he moved the dairy cows back here. This makes a good sacrifice field for dry stock. He does bring hay back here for the heifers. There is a well where the water tank is sitting, which stays open and does not freeze in the winter. If he uses good quality first cutting hay with higher sugar, the heifers will stay in good condition.

There was a storm moving in, so everyone headed back to the barn at a faster pace than when they started. Delicious cookies and drinks were enjoyed by all present. A huge thank you goes to Ray and Marilyn Yoder for hosting another very interesting and successful pasture walk.



Forage Focus: Summer Pasture Management

July 1, 2010

The goal of managing a rotational grazing system is to keep the pasture forage plants healthy and growing so that grazing livestock can meet their nutritional needs by eating those plants. This goal is accomplished by adhering to some general grazing principles within a context of understanding an animal's nutrient needs. The summer months of July and August typically are months of hot temperatures and limited rainfall. Let's examine some specific management decisions required by summer conditions.

There are two general grazing principles to keep in mind; residual leaf cover, the take half, leave half rule, and second, provide a rest period until the plant is ready to be grazed again. Specifically, in the summer, do not graze pasture grasses below 4 inches in height. Keeping some leaf cover will result in quicker plant recovery after a grazing pass. The leaves will provide some shading of the soil, helping to keep the soil cooler and more conducive to cool season grass growth. Shading the soil from the sun will also conserve moisture, and provide better regrowth conditions. In the summer the rotation through pasture paddocks must slow down. Cool season grasses grow slower under summer temperatures. More time is needed for the grass to re-grow to grazing height after a grazing pass. Specifically, allow the pasture sward to regrow to an 8 to 10 inch height before entering a pasture paddock for another grazing pass.

The application of these grazing principles requires an adequate number of pasture divisions or paddocks. What is an adequate number? In our beginning level grazing school we teach that the number of paddocks needed is determined by this formula: # of paddocks = Rest period/Grazing days + 1. The rest period during a typical summer can vary from 30 days in early summer or if temperatures do not exceed the mid 80's and some timely rains continue, to 45 or 50 days when temperatures are in the 90's and rains are few and far between. In the case of a drought, the required rest period can be 60 days plus. The amount of grazing days spent in the paddock depends upon several factors, including stocking density and grass regrowth.

If stocking density is light, more days can be spent in a paddock, but there is a high amount of selective grazing and at some point desirable plants that are beginning to regrow can get grazed again. From a plant health and productivity standpoint, plants should not be grazed again as they begin growth following a grazing pass. So, grazing management will dictate that the time it takes a plant to begin active regrowth after being grazed determines the grazing days part of this formula. In the summer, it is generally accepted that plants do not begin active regrowth until about 4-5 days after a grazing pass.

Alright, back to determining an adequate paddock number. We will use as bookends, a favorable grass growing scenario and a drought condition. Under favorable summer conditions assume a rest period of 30 days with a 4 day grazing period per paddock and under drought conditions assume a rest period of 60 days with a 5 day grazing period per paddock. Plugging these values into our formula says that we will need between $(30/4) + 1$ and $(60/5) + 1$ or 8 to 13 paddocks to manage our summer conditions. In other words, 8 to 13 paddocks are needed to allow the grazer to make management decisions that prevent pasture plants from being overgrazed, and to allow pasture plants a long enough rest period to regrow to proper grazing height.

Pasture paddocks do not have to be made with permanent fencing. Paddocks can be made with a single strand of high tensile wire that is electrified for cattle, and electro-netting can be used to make temporary pasture divisions for sheep and goats. The important concept is that more pasture divisions allow the grazer to put into practice management principles and utilize management skills. I have yet to hear a serious grazer say that they regret using or putting in more pasture divisions. (retrieved 7/19/2010 from www.farms.com; Source: OCB Beef Team)

Watershed Management Planning and Implementation in Little Elkhart River Watershed

The Indiana Department of Environmental Management (IDEM), in partnership with Environmental Protection Agency (EPA) and local watershed organizations provide watershed management planning and implementation. Thanks to IDEM and EPA the LaGrange County Soil and Water Conservation District (SWCD) has received several grants for just that purpose. Currently the SWCD is focusing their efforts in the Little Elkhart River Watershed located in the western portion of LaGrange County with a small portion in Elkhart County. There are 82,982 acres in this watershed with 72,564 acres in agriculture including pasture lands. The planning has been complete and approved for almost a year and implementation is well underway. Non point source (NPS) pollution problems identified indicated degraded water quality. Those problems include: 1) Total Phosphorus exceeds the target of 0.3 mg/l average at most sites; 2) Nitrates exceed the target of 1.5 mg/l average at most sites; 3) Average sedimentation exceeds yearly target loading of 820 tons; and 4) *E.coli* consistently exceeds the human health standard of 235 colonies per 100mls of water. The following land uses are causing the degradation, at least in part. 1) Direct livestock access to surface water system; 2) Direct barnyard runoff into surface waters; 3) Livestock manure management; 4) Lack of proper ditch bank buffering; and 5) Nutrient Management all related to agriculture. To find out what you can do to improve the water quality in the Little Elkhart River Watershed contact the SWCD office at 260-463-3471 ext 3.