UW-Extension Fond du Lac County

May 2016

UW-Extension Fond du Lac County

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Mike Winkler
Entrepreneur Educator

Vacant Position
Crops & Soils Agent

Program Assistants:

Tina Engelhardt — Angela Folske
Ann Kaiser — Gloria Kelroy

Requests for reasonable accommodations for disabilities or limitations should be made prior to the date of the program or activity for which it is needed. Please do so as early as possible prior to the program or activity so that proper arrangements can be made.

A new crops agent is coming to town!

Yes...it is almost too good to be true! It's been over a year, but we did it! Our office has finally navigated the waters of the hiring process and are excited to say we will have a crops and soils agent starting June 1st!

Loretta Ortiz-Ribbing, PhD will be joining UW-Extension Fond du Lac and Dodge Counties on June 1 as the extension crops and soils agent. Her appointment is a shared 50:50 appointment between Fond du Lac and Dodge Counties. Loretta brings 12 years of extension and outreach experience in agronomy, horticulture and organic crops. She also has experience in cover crops, IPM, entomology and weed science.

In the mean time…

Alfalfa Quality Watch: This month, be on the look out for the upcoming Alfalfa Quality Watch Program sponsored by the Fond du Lac County Forage Council. We have only one time to get it right as we set the foundation for alfalfa for the coming year.

For more information regarding the Alfalfa Scissors Cut Program, please see page 3 for details!

Website: Don't forget to visit and subscribe to http://fyi.uwex.edu/fdlag to view and receive timely updates this month regarding cropping and alfalfa quality!

Growing Season has begun! With the mad dash to get all the field work done while navigating Mother Nature, please take time to take care of yourself both mentally and physically! Also, take time on the roads and most importantly...be safe!

Tina Kohlman
Dairy & Livestock Agent
UW-Extension Fond du Lac County

The Challenge: Abortions

Abortions include the loss of a developing embryo or pregnancy. Minimizing the incidence of the disease has both reproductive and financial implications, as one abortion can cost the dairy between $500 and $900. Although abortions may easily be detected, 70 percent of the time the cause cannot be identified.

Common diagnosis/identification of challenge

Before an abortion diagnosis can be made, pregnancy must be confirmed. Abortions occurring mid to late term can often be recognized by vaginal discharge or, in late term, retained placenta is also common. Only 46 percent of all abortions are detected, and careful observation is needed to increase diagnosis rates.

Troubleshooting tips

With many factors contributing to abortions including genetic defects, multiple births, injuries, infections and toxicities, it is important to troubleshoot and avoid new abortions. Specifically, investigate a few key areas to prevent abortions:

- Avoid injuries by minimizing the number of slippery surfaces cows are in contact with, including ice and non-grooved cemented areas.
- Use extreme care when dealing with the reproductive tract. If for any reason you must enter the reproductive tract of a pregnant cow, it is imperative to not injure the uterus or disrupt the developing calf.
- Determine the cause of abortion. The aborted fetus, placenta and blood from the aborting cow should all be analyzed to determine the cause of abortion and detect viruses a cow may be carrying.

Who to consult/what to ask

With abortions, veterinarians can be helpful to prevent the problem and diagnose the challenge. Things that should be discussed with them include:

- Number of days since last service that they feel comfortable detecting pregnancy without harming the developing calf.
- Vaccinations administered to potentially pregnant cows.

A herd nutritionist should also be consulted and feed samples should be evaluated regularly.

Source: Dairy Cattle Reproductive Council

What's Standing Alfalfa Worth in 2016?

Image Source: M. Rankin, 2001.

One of the challenges in coming up with a value for standing hay is the lack of daily commodity market pricing like corn and soybeans. Another challenge this year is the significant drop in hay price, in some cases almost half of what it was going for just a few years ago. So the price for standing hay last year might not be appropriate this year. In this article, UW-Extension Waupaca County Agriculture Agent Greg Blonde shares an example for pricing standing hay in 2016.

Assuming a four (4.0) ton dry matter (DM) yield/acre for the entire year of dairy quality alfalfa hay ranging from $100 to $150/ton baled ($0.06 to $0.09/lb DM) with half the value going to the land owner for input costs (land, taxes, seed, chemical and fertilizer), and half the value credited to the buyer for harvesting, field loss and weather risk, standing value for this alfalfa field for the entire season would be $230 to $360/acre.

Using a three cut (43% / 31% / 26%) or four cut (36% / 25% / 21% / 18%) harvest schedule, the following price range (rounded to the nearest $5) may offer a starting point for buyers and sellers to negotiate a sale of high quality standing alfalfa in 2016:

Crop	4 cuts	3 cuts
1st	$100 -$155 per acre	$85 - $130 per acre
2nd	$60 -$90 per acre	$70 - $110 per acre
3rd	$50 - $75 per acre	$60- $95 per acre
4th	$40 - $65 per acre	

Alfalfa Quality Watch Project

No doubt, in most dairy farmers' minds, forage quality is an important determinant of farm profitability. Poor quality forages increase feed costs and limit milk production. The most important factor affecting quality of alfalfa is maturity at harvest. As alfalfa matures digestibility of dry matter and fiber decrease and fiber content increases. However, harvesting too early reduces the yield of alfalfa and results in alfalfa that is difficult to feed because its quality is too high. In addition, harvesting too early can reduce stand life of alfalfa. Although it is impossible to always harvest alfalfa at the optimum maturity because Mother Nature doesn't always cooperate, there are methods to help you come closer to your goal.

The scissors cut/clip method for monitoring forage relative feed value (RFV) of first cutting alfalfa is a proven method that's been around for over 15 years.

The Fond du La County Forage Council will be hosting an Alfalfa Quality Watch Program to help farmers determine the best time to harvest alfalfa for optimal quality. This year, the PEAQ (Predicated Equation for Alfalfa Quality) and Alfalfa Scissors Cut Analysis will be used to monitor alfalfa quality for first cutting.

Locations:
Alfalfa scissors-cut samples and PEAQ Stick readings for alfalfa quality will be taken from five fields this year (Malone, Campbellsport, Brownsville, Byron, and Ripon).

Dates:
Estimates of alfalfa quality RFV in the field using PEAQ stick reading will be conducted on Mondays. Results will be available on Monday afternoon.

Estimates of alfalfa quality RFV in the field using the PEAQ Stick and Alfalfa Scissor Cut Analysis will be conducted on Thursdays with results on Friday afternoon.

Information Available:
Alfalfa Forage Quality Watch Information will be updated on Monday and Friday mid to late afternoons and available via:

Web: http://fyi.uwex.edu/fdlag/alfalfa
Blog post: Subscribe to http://fyi.uwex.edu/fdlag to receive email regarding updates to alfalfa quality watch
Forage Line: 920.929.1393

Road Ready for 2016?


Image Source: http://fyi.uwex.edu/agsafety

Spring has arrived! Soon all types of farm machinery will be traveling Wisconsin highways. As work continues to update Wisconsin laws related to operating agricultural vehicles on the highway, there are some new changes for 2016. In addition, new lighting and marking requirements (http://fyi.uwex.edu/ioh/ioh/lights-and-marking/) for Implements of Husbandry (IoH) were effective of November 1, 2015.

Now is a good time to plan your routes. Factors to consider are:

- Has there been a change to the local option for weight requirements? Check out the 2016 IoH/Ag CMV Requirement map at https://datcpgis.wi.gov/IoH/.
- Purchased new machinery and will it need to operate by permit (http://fyi.uwex.edu/ioh/permits-2/) for excess weight and length?
- Changed from a towed TMR or self-unloading forage wagon to a truck-mounted vehicle but unsure if the vehicle is an Ag CMV (http://fyi.uwex.edu/ioh/agcmv/) or a CMV.
- Need to train employees about operating on highway so what related to rules of the road (http://fyi.uwex.edu/ioh/rules-of-the-road-2/)?

As you change oil, check tires and hitch up field equipment, take time to be road ready and legal in 2016. Safe travels!

Source: http://fyi.uwex.edu/ioh/

Estimating Alfalfa RFV in the Field Using PEAQ

Step 1: Choose a representative 2-square-foot area in the field.

Step 2: Determine the most mature stem in the 2-square-foot sampling area using the criteria shown in the table at right.

Step 3: Measure the length of the tallest stem in the 2-square-foot area. Measure it from the soil surface (next to plant crown) to the tip of the stem (NOT to the tip of the highest leaf blade). Straighten the stem for an accurate measure of its length. The tallest stem may not be the most mature stem.

Step 4: Based on the most mature stem and length of the tallest stem, use the chart at the right to determine estimated RFV content of the standing alfalfa forage.

Step 5: Repeat steps 1 to 4 in four or five representative areas across the field. Sample more times for fields larger than 30 acres.

NOTE: This procedure estimates alfalfa RFV content of the standing crop. It does not account for changes in quality due to wilting, harvesting, and storage. These factors may further lower RFV content by 10 to 25 units, assuming good wilting and harvesting conditions. This procedure is most accurate for good stands of pure alfalfa with healthy growth.

Height of Tallest Stem (from soil surface to stem tip)	Stage of Most Mature Stem		
	LATE VEGETATIVE	BUD STAGE	FLOWER STAGE
	Vegetative (>12") No buds visible	1 or more nodes with visible buds. No flowers visible	1 or more nodes with open flower(s)
-inches-	----------Relative Feed Value----------		
16	237	225	210
17	230	218	204
18	224	212	198
19	217	207	193
20	211	201	188
21	205	196	183
22	200	190	178
23	195	185	174
24	190	181	170
25	185	176	166
26	180	172	162
27	175	168	158
28	171	164	154
29	167	160	151
30	163	156	147
31	159	152	144
32	155	149	140
33	152	145	137
34	148	142	134
35	145	139	131
36	142	136	128
37	138	133	126
38	135	130	123
39	132	127	121
40	129	124	118
41	127	122	115
42	124	119	113

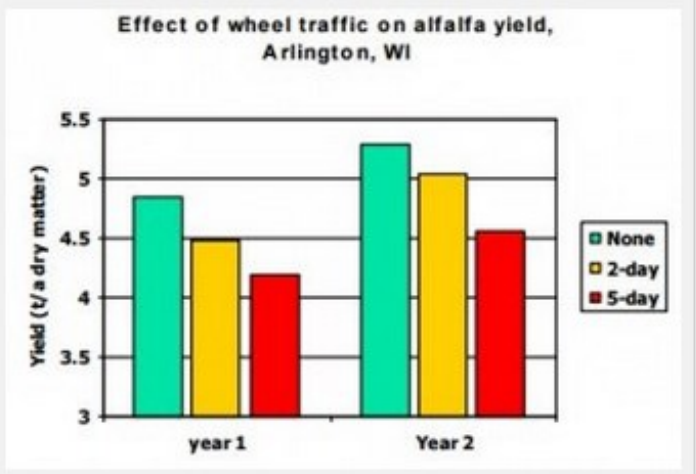
Minimizing Wheel Traffic Damage to Alfalfa

What damage is caused by wheel traffic?

Wheel traffic is known to increase soil compaction which, on some soils, reduces macropore air permeability, soil water infiltration and root development of alfalfa. All of which reduce yield. However, our research has indicated that the largest effect of wheel traffic is to break off regrowing alfalfa stems thereby reducing the next cutting yield.

How much is yield of next cutting reduced?

We compared harvesting (wheel traffic) at 2 days after cutting vs 5 days after cutting. As the graph shows, yield of the next harvest was reduced about 6% for each day delay in traffic application after cutting.



Yield loss was largely due to reduction in number of stems from breakage by the tires. This is shown in the picture below where traffic was applied on the left 5 days after mowing but not on the right. Pictures were taken 10 days after mowing.

Traffic 5 days after mowing

No mowing

What is recommended to reduced yield loss from wheel traffic?

We believe the following management recommendations will reduce yield loss due to wheel traffic:

1) Plant traffic tolerant varieties (check http://www.uwex.edu/ces/forage/ for test results).
   - Wheel traffic will cause some soil compaction (and associate yield loss) for grasses but will not break of stems as occurs with alfalfa. So yield loss will be much less for grass than for alfalfa.
2) Use small tractors when possible to reduce soil compaction.
3) Avoid unnecessary trips across the field when harvesting:
   - Mowing and conditioning in a single operation.
   - Loaded wagons/trucks should be driven off the field in as little distance as possible.
   - If bales are dropped, collect with least driving possible and as soon as possible.
   - Do not drive on alfalfa field when harvesting crop of adjacent field.
4) Consider using larger harvesting equipment to reduce the percent of field covered with wheel tracks (however, the affected area has greater weight applied to it). This could be another benefit of contract harvesting.
5) Avoid use of tractors with dual wheels.
6) Harvest (drive on field) as soon after cutting as possible:
   - Make silage from higher yielding fields, hay from lower yielding fields.
   - Use wide swath to allow hay/haylage to dry faster.
   - Make wrapped bales to allow harvest of wetter hay.
   - Apply manure immediately after harvest.

Source: Dan Undersander
Extension Forage Specialist
UW-Extension
Focus on Forage

Fond du Lac County
227 ADMINISTRATION/EXTENSION BUILDING
400 UNIVERSITY DRIVE
FOND DU LAC WI, 54935

NON-PROFIT ORGANIZATION
US POSTAGE PAID
FOND DU LAC WI 54935
PERMIT 110

Return Service Requested

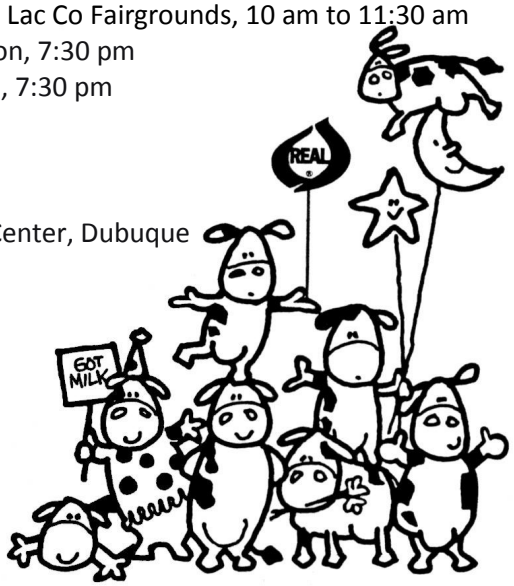
UW-Extension Agriculture Calendar of Events

MAY 2016

TBA Fond du Lac County Forage Council's Alfalfa Quality Watch Program
5 Fond du Lac County 4-H Livestock Judging Informational Meeting, UW-Extension, 6:30 pm
6 Ag Lender's Update Meeting, Liberty Hall, Kimberly, 10 am to 3 pm
14 Fond du Lac County State Fair Dairy Round-Up, Fond du Lac County Fairgrounds, 10 am
14 Fond du Lac County Jr Holstein Fitting & Showing Workshop, Fond du Lac Co Fairgrounds, 10 am to 11:30 am
18 Youth Meat Animal Quality Assurance (MAQA) Meeting, UW-Extension, 7:30 pm
23 Fond du Lac County Dairy State Fair Planning Meeting, UW-Extension, 7:30 pm

JUNE 2016

1 **WELCOME OUR NEW CROPS & SOILS AGENT!**
15-16 Four-State Dairy Nutrition & Management Conference, Grand River Center, Dubuque
24 District 10 Holstein Show, Fond du Lac County Fairgrounds
19 Ripon FFA Alumni Country Breakfast
22 Dodge County Forage Council Twilight Meeting, RCI Engineering, Mayville, 7:00 pm
26 Fond du Lac AC Agri-Business Council Breakfast on the Farm, J & J Pickart Dairy, LLC, Johnsburg, 8 am - noon



JULY 2016

20-24 Fond du Lac County Fair

We are on the web! Visit us at http://fyi.uwex.edu/fdlag