UW-Extension Fond du Lac County

April 2018

Revised Dairy MPP Enrollment Open

The enrollment period will run from April 9-June 1, 2018. The changes enacted by this agreement include:

- Calculations of the margin period is monthly rather than bi-monthly
- Covered production is increased to 5 million pounds on the Tier 1 premium schedule
- Premiums for $4.50 and $5 coverage were eliminated, and other premiums were reduced by an average of 70 percent; and
- An exemption from paying the $100 administrative fee for limited resource, beginning, veteran, and disadvantaged producers.

Dairy operations must make a new coverage election for 2018, even if you enrolled during the previous 2018 signup period. Producers may opt out of the program by simply not submitting the enrollment form CCC-782.

The restriction of participating in both MPP and LGM-Dairy is still in effect. During the 2018 enrollment period, producers with an active LGM-Dairy policy cannot enroll in MPP for months with LGM-Dairy coverage. Their coverage will start only after last insured month under LGM-Dairy occurs and premium calculations will be prorated for only the months with MPP coverage.

What is significant is that coverage elections made for 2018 will be retroactive to January 1, 2018.

This year the MPP will make indemnity payments for coverage at $7 and above beginning with February milk production. There is a forecast producers buying up to the $8 level will receive net benefits under the program for the first half of the year at Tier 1 premiums. Producers should try to make sure that they are only covering up to 5 million pounds of production to stay in the Tier 1 premium prices.

Form more information, please contact **Fond du Lac County Farm Service Agency at 920.923.3033.**

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Vacant
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Shelley Tidemann
Family Living Educator

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Area Extension Director

Program Assistants:

Pam Bartoli **Tina Engelhardt**
Ann Kaiser **Kelly Lamb**

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.

Feeding Strategies During Challenging Times

Difficult economics in the dairy industry now and likely for much of 2018 have herd owners and their advisors working to find opportunities to increase margins and/or cut costs. Given the large contribution of feed and crop expenses to total operating costs, it is logical to carefully evaluate these aspects of management. There are five key focus areas to ensure your feeding program is all that it can be.

1. **Know and track Income Over Feed Cost (IOFC) and Income Over Purchased Feed Cost (IOPurFC).** Income over feed cost (milk revenue minus feed cost) is more correlated with overall farm profitability than any other single metric and can be refined further to look specifically at Income Over Purchased Feed Cost. In analyses of feeding programs conducted as part of PRO-DAIRY discussion groups, herds with higher IOFC had:
   - Higher fat and protein yield per cow (generally over 6.0 lbs/day of fat and protein shipped)
   - Higher feed efficiency (over 1.65 lbs of ECM2 per lb of DMI) across the lactating cows
   - Higher feed cost per cow per day (cows were making more milk and so had higher DMI)
   - Slightly higher cost per lb of TMR dry matter -- $0.137 vs $0.132 per lb
   - Optimized use of forages (0.9 to 1.0% of cow body weight as forage NDF intake)
2. **Make sure you are optimizing use of homegrown forages and feeds.** Herds that focus on and achieve high forage quality can be rewarded by increasing use of high quality forage in the ration. One time-tested metric is to calculate forage NDF intake as a percentage of body weight for lactating cows. Herds optimizing forage use often are able to feed 0.9 to 1.0% of body weight as NDF from forage sources. The highest quality, highest digestibility forages should go to the transition and early lactation cows. Typically, lower digestibility forages can be targeted to heifers and far off dry cows.
3. **Fine-tune your feeding management.** Losses due to poor bunk and feeding management can be subtle but meaningful. Are you taking at least 6 to 12 inches of silage off of the face of bunk silos every day and ensuring bunk faces are tight? Is leftover feed kept to a minimum? Has feeding equipment been maintained so to deliver consistent performance? Is feeding accuracy being monitored and shrink of ingredients being tracked? Is fresh feed available for cows upon return from the parlor and being pushed up regularly (i.e., every 2 to 3 hours)? Target 5% refusal rates for close-up cows (close-up refusal can be re-fed to far-off cows) and fresh cows, and target 2 to 3% refusal rates for high cow groups (refusal from fresh and high groups can be re-fed to late lactation cows).
4. **Strategically review rations with your nutritionist.** Review rations and strategy with your nutritionist and make strategic decisions about where to try to save cost without compromising herd performance. There may be opportunities to optimize homegrown feeds and decrease purchased feeds.

   Review rations and prioritize maintaining ration ingredients and feed additives that directly affect daily cash flow/income over feed cost by contributing to component yield/feed efficiency or are fed during very focused periods of the lactation cycle (i.e., close-up and fresh cows) with research based evidence that they contribute to improved productivity and health. The long-term implications on production, health, and reproduction for not meeting the needs of the transition cow are large.

   Calf nutrition should not be a place where farms seek to cut feeding rates or quality of milk replacer. Such apparent savings can be easily erased (and then some) by increased drug costs for treatment and calf morbidity/mortality with long-term impacts.
5. **Carefully review cow and heifer inventories and needs.** Are the right cows being milked? How many heifers do you need? Overstocking contributes to lower feed efficiency through negative effects on milk components and poorer rumen efficiency. Are you compromising performance of the whole by continuing to milk cows that are not covering their feed and variable costs?

When it comes to management strategies during challenging times, it's the little things that count.

Source: adapted from Tom Overton & Larry Chase, Pro-Dairy Cornell University.

Soybean Planting Date & Maturity Group Considerations Moving into 2018

Early May planting in Wisconsin has been documented to increase yield due to increased light interception (*Gaspar and Conley, 2015*). Earlier planting dates are able to increase light interception in two ways, which are both demonstrated in Figure 1. First, the reproductive growth period between R1-R6 occurs during longer days with the May 1st (Green line) compared to June 1st (Orange line) planting date. Secondly, the time spent in the R1-R6 growth stages is increased with the earlier planting date. As Figure one shows, the May 1st planting date spent ~60 days from R1-R6 compared ~45 days for the June 1st planting date. Therefore, early plated soybeans experience both longer duration in reproductive growth (more days) and reproductive growth during the longest days of the summer.

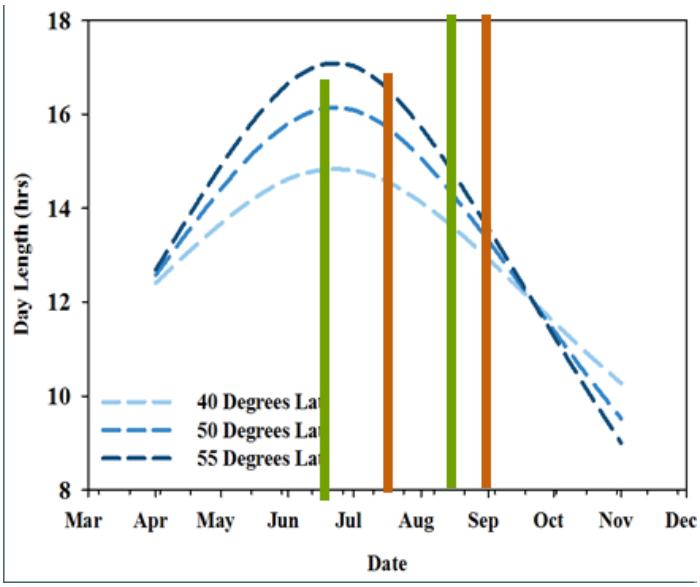

Figure 1. Blue lines represent day length at various latitudes. Most WI soybeans are grown between 43 and 45 degrees latitude. The vertical lines represent the time spent from R1 through R6 for May 1st (Green Lines) and June 1st(Orange Lines) planting dates. WI soybeans are mainly grown between 43 and 45 degrees latitude.

Yet in some instances (weather or logistical problems), planting can be delayed or replanting may be needed. Therefore, investigating the effect of different MG's at multiple planting dates across the state would be useful. Thus, DuPont Pioneer and the Wisconsin Soybean Marketing Board funded a 3-year study to examine proper MG selection at 5 different planting dates across the state to maximize yield. So let's look at the 2014-2016 data.

Trials were conducted at Arlington, Hancock, and Spooner, WI. The five planting dates at each location were planting roughly on: (1) May 1th, (2) May 20th, (3) June 1st, (4) June 10th, and (5) June 20th. Planting after June 20th is generally not recommended in WI. Two varieties within each realistic MG from a 2.5 all the way down to a 00.5 were tested depending upon the location and planting date and are displayed in Table 1.

Planting Date		Arlington	Hancock	Spooner
1 (May 1th)		2.5, 2.0, 1.5	2.5, 2.0, 1.5	1.5, 1.0, 0.5
2 (May 20th)		2.5, 2.0, 1.5	2.5, 2.0, 1.5	1.5, 1.0, 0.5
3 (June 1st)		2.0, 1.5, 1.0	2.0, 1.5, 1.0	1.0, 0.5, 0.0
4 (June 10th)		2.0, 1.5, 1.0	2.0, 1.5, 1.0	1.0, 0.5, 0.0
5 (June 20th)		1.5, 1.0, 0.5	1.5, 1.0, 0.5	0.5, 0.0, 00.5

We will start with the easy and redundant part, get your soybeans in the ground ASAP to maximize yield. This is very evident again in this trial as shown in Figure 2 and 3. If the soil is fit, soil temps are near 50 F, and the forecast is favorable….. get that soybean planter rolling! As you would expect we found some very interesting synergies between early planting and longer MG's. Figure 2 contains MG 1.5 soybeans which at the May 1st planting date only achieved ~85% of max yield. Figure 3 contains the longest maturing soybean varieties (>1.5) for each location where soybeans reached 99% of max yield, with May 1st planting. Furthermore, as planting is delayed, the earlier MG bean's (Figure 2) do not show a quick and dramatic yield decline compared to the later maturing beans (Figure 3). Therefore, those that may have not experienced yield loss from delayed planting are likely planting varieties from a MG too short for their respective area. **Clear yield synergies are demonstrated in Figure 2 and 3 from planting early and using a longer MG soybean variety. Both management practices add no additional cost, meaning any yield increase is direct profit.**

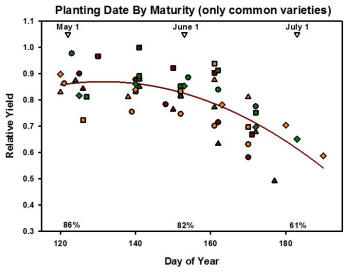

Figure 2. Yield of planting date from May 1st (120) into June of 1.5MG soybean varieties.

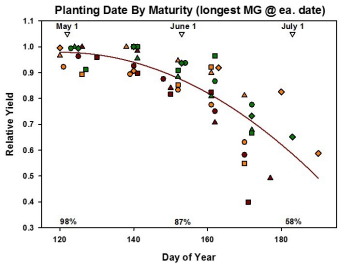

*Figure 3. Yield of planting date from May 1st (120) into June **for longest maturing soybean varieties** at each location.*

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Continued…Soybean Planting Date & Maturity Group Considerations Moving into 2018

Table 2. Effect of Maturity Group on Yield tested within each location and planting date, during 2014, 2015, and 2016

Planting Date		Arlington	Hancock	Spooner
1 (May 1th)		2.5	2.5	1.5
2 (May 20th)		2.5	2.5	1.5
3 (May 30th)		2.0	2.0	1.0
4 (June 10th)		2.0	2.0	0.5
5 (June 20th)		1.5	1.5	0.5

The numerically highest yielding MG for each planting date and location. MG that are bold and colored red were significantly higher at the $P \leq 0.10$

Table 2 agrees with the conclusion from Figures 2 and 3, that early planting and longer maturity groups maximize yield. However, due to no significant MG effect at the Spooner location, the synergy of early planting and longer MG's, may not be as consistent in Northern WI where the growing season is condensed. Planting date 5 at Arlington and Hancock was not significant for MG effects, but the longest MG planted there still yielded the highest numerically. This was also the case at Spooner, but the 0.5 MG significantly out yielded the 0.0 and ultra-early 00.5 MG varieties.

These results suggest planting a portion of your acres to slightly longer MG than normal within May can result in greater yields with no additional dollars spent. In addition, when planting is delayed into June, switching to a variety much more than 0.5 MG earlier than a full season variety (2.5 MG) may limit yield potential. However, if planting is delayed until mid to late June or more likely replanting is needed, a variety that is at least a full MG earlier should be considered to avoid fall frost damage.

The aforementioned soybean yield advantage to early planting was also quantified across WI (as well as other soybean production regions) in our North Central Soybean Research Program and Wisconsin Soybean Marketing Board funded project entitled *Benchmarking Soybean Production Systems in the North-Central USA.* Wisconsin farmers shown in the coded regions 1R, 4R, and 5R (shown in Image 1) experienced a 0.4 to 0.5 bu per acre per day yield loss when planting was delayed past April 25 (Figure 4) (*Edreira et al., 2017*).****Note we are not advocating planting into poor soil conditions just to plant early.** For more information on this project, please see the two below Extension publications that have resulted from published research.

1. *Sifting and winnowing: analysis of farmer field data for soybean in the US North-Central region*
2. *Key Management Practices That Explain Soybean Yield Gaps Across the North Central US*

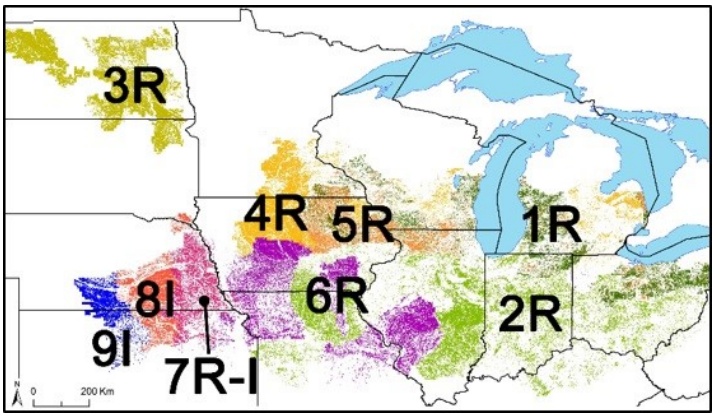


Image 1. Map of the North Central US region showing nine technology extrapolation domains (TEDs) for the present study. A coding system (from TED 1 to 9) is used to identify each TED (shown with a unique color) and its associated water regime (I: irrigated, R: rainfed). There were actually 10 TED-water regimes (denominated as just TEDs for simplicity) because rainfed and irrigated fields co-existed in TED 7 (7R and 7I, respectively).

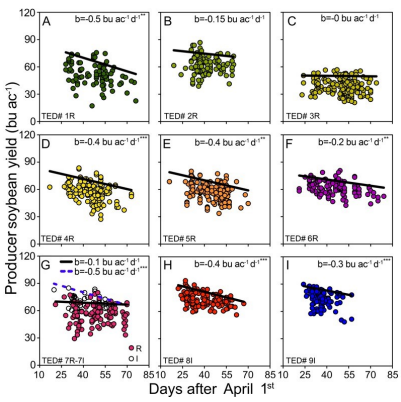


Figure 4. Producer soybean yield plotted against planting date in 10 technology extrapolation domains (TED) in the NC USA region, including rainfed (A–G) and irrigated (G–I) production areas. Solid line corresponds to the fitted boundary function using quantile regression (percentile 90th). Separate boundaries were derived for rainfed (empty symbols) and irrigated (solid symbols) soybean fields in TED7. Slope of the fitted boundary function (b) is shown, with asterisks indicating significance at $p < 0.1$, $p < 0.05$**, and $p < 0.01$*** for the null hypothesis of $b = 0$.*

In conclusion, early planting is critical for higher yields through increased light interception, and can be further maximized by planting longer MG's. However, variety selection heavily based upon the MG is not the "silver bullet" for increasing yields. Yet, it does provide a strong "potential" for higher yields with no additional dollars spent, especially in early planting situations. Therefore, growers should give consideration to MG when selecting varieties, but past local and regional performance, disease package, scn-resistance, etc. should also strongly be considered.

As a final note, it is important for soybean farmers to remember that planting date and maturity group also interact and play a role in determining soybean seed composition characteristics (oil, protein, and amino acid profile). For more information on this topic, please see *Planting Date, Maturity, and Temperature Effects on Soybean Seed Yield and Composition*.

Source: Shawn Conley, UW-Extension Soybean & Small Grain Specialist

Assessing Winter Damage to Alfalfa

We do live and farm in Wisconsin after all…so when we get below normal cold temperatures in April, we all know it is possible but sure wish otherwise. Fortunately, the recent snow cover may help with insulating dormant plants a bit, but time will tell. The amounts of snow cover in some spots in the field may be minimal.

The best way to tell if alfalfa and wheat have survived is to go out and examine the plants. Dig up a few plants throughout your field and look at plant and root health. White root systems are healthy, brown roots indicate rotting or death.

Alfalfa Stand Assessment

Start by estimating your yield potential. The best way to determine the yield potential of your current alfalfa stand is using a stem count. Dr. Dan Undersander and others with UW-Extension have developed a table for determining dry matter yield in tons per acre based on the number of stems per square foot. Typically greater than 55 stems per square foot will not limit yield but if the field has an average of less than 39 stems per foot one should consider replacing the stand (Figure 1 and Table 2). It is always best to average stand counts from three to five representative locations per field.

Figure 1. Alfalfa stem count and yield potential.

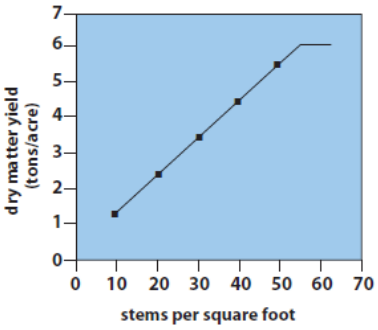


Table 2. Stand density recommendations

stand density (stems/sq ft)	action	predicted yield potential (assuming no winterkill)
>55	stem density not limiting yield	same as current year
40–55	some yield reduction expected	if good health, same as current year; if >30% in category 4, significantly less
<39	consider replacing stand	if good health, same as current year; if >30% in category 4, significantly less

After counting stems, assess the overall crown and root health at each location in the field. Dig 5 plants along with about 6 inches of the crown from each location where you counted stems. To assess crown rot, follow the protocol outlined in the UW-Extension Team Forage publication (A3620) at http://fyi.uwex.edu/forage/alfalfa-stand-assessment-is-this-stand-good-enough-to-keep/. This publication provides guidelines for assessing whole plant health and images useful for rating alfalfa crown and root health on plants slit in half to check for discoloration.

Determine management strategies.

Different management strategies may be required depending on the extent of winter injury to your alfalfa stand. Strategies include allowing plants to mature longer before cutting; increasing the cutting height; applying adequate fertilizer; controlling weeds; and allowing adequate food reserves to build up in the fall. Calculating your risk for winter injury and determining what management practices to select can be found in the UW-Extension Focus on Forage article online at: http://fyi.uwex.edu/forage/evaluating-and-managing-alfalfa-stands-for-winter-injury/.

UW-Extension Hay Market Report-April 9th

Hay Grade	*Bale type*	*---------- Price ($/ton) ----------*		
		Average	Minimum	Maximum
Prime (> 151 RFV/RFQ)	Small Square	$223.00	$168.00	$320.00
	Large Square	$190.00	$105.00	$250.00
	Large Round	$133.00	$75.00	$180.00
Grade 1 (125 to 150 RFV/RFQ)	Small Square	$191.00	$130.00	$280.00
	Large Square	$153.00	$50.00	$205.00
	Large Round	$115.00	$45.00	$190.00
Grade 2 (103 to 124 RFV/RFQ)	Small Square	$108.00	$105.00	$110.00
	Large Square	$118.00	$60.00	$175.00
	Large Round	$108.00	$40.00	$190.00
Grade 3 (87 to 102 RFV/RFQ)	Small Square		No Reported Sales	
	Large Square	$104.00	$50.00	$160.00
	Large Round	$88.00	$60.00	$130.00

Wheat Stand Assessment

Now is a good time to scout your fields and assess the quality of your wheat stand. Check for new green growth and dig green and brown plants to look at their root systems. Cut stems to find the growing point and check its health. Count wheat plants over a 20-foot span in five areas of your field for a period of several weeks (including nice sunny weeks) and until the crop grows 8 to 10 inches tall to judge whether any damage may have occurred and to determine whether plants will outgrow injury. Plant health can also be determined now by digging plants, placing them in a warm spot, and watching for new, white root regrowth from the crown.

As a general guideline, an adequate stand is estimated by the number of tillers or heads per square foot. Sixty to seventy tillers often define an adequate stand; however, productive tillers may be hard to estimate at this time. Instead, another general rule is 20 live plants per square foot should be adequate for high yield, and 15 live plants per square foot would be worth keeping if they are healthy, have good leaf growth, and appear to have potential for tillers to form. If plants are not healthy UW Extension's critical threshold is 12 to 15 live plants per square foot for turning over a field. The decision to replant should be automatic if you scout and find less than 12 live plants per square foot.

If you have questions about assessing the health of your alfalfa or wheat, please contact Dr. Loretta at 920-929-3171 (Fond du Lac County) or 920-386-3790 (Dodge County).

Photo credit: L. Ortiz-Ribbing

From the Desk of Dr. Loretta

Resources for the season:

2017 Custom Rate Guide—Just what everyone has been waiting for. The new Wisconsin Custom Rate Guide for 2017 is available at:

https://www.nass.usda.gov/Statistics_by_State/Wisconsin/Publications/WI-CRate17.pdf.
This guide provides statewide, district, and regional averages for rates paid by farmers to do typical custom work in 2017. This guide is a summary of farmer data collected via mailed surveys.

Hay Market Report— For current hay prices check out the UW-Extension Team Forage Hay Market Report available at: https://fyi.uwex.edu/forage/h-m-r/.
Data for this report is compiled by Richard Halopka, the UW-Extension Clark County Crops & Soils Agent, from public and private sales and reports in the Midwest.

June 15th Deadline for Cover Crop Incentive Program (CCIP)… Do you have land you farm in Dodge County? The Farmers for Healthy Soil-Healthy Water (HSHW) received a grant that allows them to offer an incentive program for planting cover crops. This funding comes from the Wisconsin Department of Agriculture Trade, and Consumer Protection (DATCP) with some funding also coming from the Lake Sinissippi Improvement District and the Beaver Dam Lake Improvement Association. Acres with a successfully established cover crop will receive $20.00/acre. Participating farmers, must match 1:1 (pay for, plant, and successfully establish) 1 acre for every acre of covers getting an incentive payment. Only acres in Dodge County will be eligible to receive payment from HSHW. If you farm land in Dodge County those Dodge County acres are eligible.

Please see the enclosed Dodge County Farmers for Healthy Soil-Healthy Water Cover Crop Incentive Program (CCIP) Application Guidelines and application form.

Fond du Lac County Soil Health Farmer Group—If anyone who farms in Fond du Lac County is interested in being part of starting a FdL Soil Health group, please contact Dr. Loretta ASAP at loretta.ortizribbing@uwex.edu or call 920-929-3171. We are interested in having an informal brainstorming 1 hour lunch meeting at a local restaurant (Dutch treat) either Monday April 23, Tuesday April 24th or Friday April 27th.

When Do I Cut? Predicting Pre-Harvest Alfalfa Quality

Determining when to cut first-crop alfalfa is often difficult because alfalfa quality, relative to flowering stage, varies greatly. To help with this dilemma, agronomists at the University of Wisconsin - Madison developed the Predictive Equations for Alfalfa Quality (PEAQ) method which predicts alfalfa's Relative Feed Value (RFV) at the time of cutting.

The PEAQ method measures standing alfalfa's forage quality before it is harvested by measuring alfalfa height using a wooden PEAQ measuring stick and an equation to determine alfalfa's RFV. The RFV values are calculated based on the alfalfa plant's maturity stage.

Dodge and Fond du Lac Forage Council members will be evaluating forage conditions by collecting biweekly PEAQ readings on Mondays and Thursdays starting May 14th through May 31th. These PEAQ readings will be reported and available on the Dodge and Fond du Lac County UW-Extension websites. In addition, a few Fond du Lac sites may be evaluated using the scissor cut method. These results will be posted with the PEAQ readings, as well.

However, any farmers growing alfalfa are encouraged to report their PEAQ readings by noon on Mondays and Thursdays by calling the Dodge County UW- Extension office at 920-386-3790 or the Fond du Lac UW-Extension office at 920-929-3171. The more readings reported will allow for a more precise review of the forage conditions and alfalfa development in both counties.

Those reporting their PEAQ readings are asked to provide a general location of the field (closest town), the relative feed value, alfalfa height, alfalfa stage of development, and age of alfalfa stand. The complete procedure for *Estimating Alfalfa RFV in the Field Using PEAQ* can be found online on the UW-Extension Team Forage Website at: https://fyi.uwex.edu/forage/estimation-of-alfalfa-ndf-using-peaq-with-a-simplified-staging-scale/. The Dodge County Forage Council has PEAQ sticks available to purchase for $5 at the Dodge County UW Extension office.

Producers can access current Dodge County PEAQ readings at the Dodge County UW-Extension website at http://dodge.uwex.edu/agriculture/forage-council/, Or Fond du Lac readings at the Fond du Lac UW-Extension site https://fyi.uwex.edu/fdlag/alfalfa/. Please connect with us on Facebook or call 920-386-3790 or 920-929-3171.

The Dodge and Fond du Lac County Forage Councils and UW-Extension are dedicated to the production of higher quality forage through education and application. If you have questions, please contact Dr. Loretta at 920-929-3171 (Fond du Lac County) or 920-386-3790 (Dodge County).

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

Mark Your Calendars for Up Coming Agricultural Events

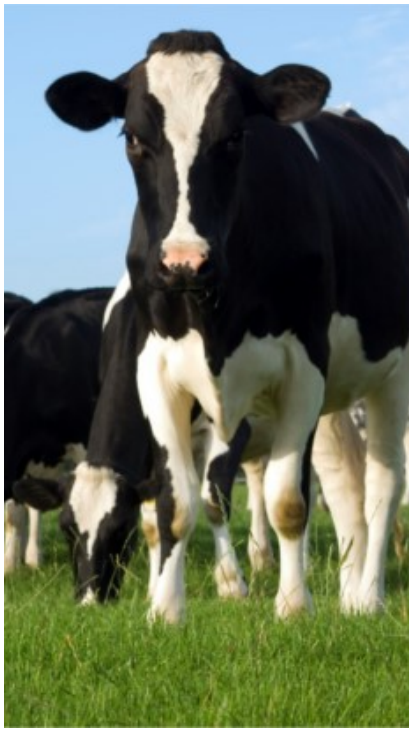
May 2018

4 F Farm Management Update for Ag Professionals
9:30 am to 3:00 pm | Liberty Hall, Kimberly

7 M Youth for the Quality Care of Animals (YQCA)-Ages 8-11
7:00 pm | UW-Extension

26 Sa Fond du Lac County Jr Dairy State Fair-Round Up
10:00 am | Fond du Lac County Fairgrounds

30 W Youth for the Quality Care of Animals (YQCA)-All Ages
7:00 pm | UW-Extension



June 2018

20 W Dodge County Forage Council Twilight Meeting
6:30 pm | Michel's Family Farm, N11805 Butternut Road, Lomira

24 Su Envision Fond du Lac County Agri-Business Council Breakfast on the Farm
8:00 am to 12:00 noon | Wiese Dairy, N7661 County M, Rosendale