

May 2017



UW-Extension Fond du Lac County

227 Admin/Extension Building
400 University Drive
Fond du Lac, WI 54935
Phone: 920.929.3171
Web: <http://fyi.uwex.edu/fdlag>

Fond du Lac County Educators:

Tina Kohlman
Dairy & Livestock Agent

Amanda Miller
FoodWise Coordinator & Family
Living Educator

Pam Nelson
FoodWise Nutrition Educator

Dr. Loretta Ortiz-Ribbing
Area Crops & Soils Agent

Araceli (Shelly) Oswald
4-H Youth Development Assistant

Patty Percy
Community Garden Coordinator

Denise Retzleff
4-H Youth Development Educator

Shelley Tidemann
Family Living Educator

Diana Tscheschlok
Community Resource Development
Educator

Program Assistants:

Tina Engelhardt Angela Folske
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.

MARK YOUR CALENDAR FOR THIS YEAR'S FORAGE TWILIGHT MEETING

Wednesday, June 14, 2017

Farm Tour @ 6:30 P.M.

Educational Program on Dairy Robots and Using Cover Crops in
Corn Silage Rotations @ 7:15 P.M.

Food & Beverage following program

Dodger Acres

W10734 Schmoltdt Rd

Rosendale, WI 54974

Farm Information: Dodger Acres is a 4th generation farm in the Rosendale area. Owned and operated by Kevin & Patti Madigan and Justin & Kathryn Madigan. Dodger Acres milk 160 cows and crop 750 acres. The forage crops grown include alfalfa, winter rye, and Sudan grass. Corn, soybeans, winter wheat, and canning peas are also grown. See enclosed flyer about meeting.



DODGE COUNTY

FORAGE COUNCIL



Tina Kohlman
Dairy & Livestock Agent
UW-Extension Fond du Lac County
Email: tina.kohlman@uwex.edu

Dr. Loretta Ortiz-Ribbing
Area Crops and Soils Agent
UW-Extension Fond du Lac & Dodge Counties
Email: loretta.ortizribbing@uwex.edu

Maximize Milking Technician's Effectiveness

Information provided by Rhyannon Moore, Michigan State University, and adapted for Udder Topics



Dairy farm employees are often the “boots on the ground” in the milking parlor. They have eyes and hands on cows every day, so why not take advantage of their insight? Encourage employees to recognize six

simple signs that help indicate if milking equipment is running efficiently.

Correctly Aligned Liners (Inflations)

Even if employees don't change liners, they should be aware of any that aren't properly installed. Most liners have markings on the mouthpiece that align with markings on the short milk tube. Align hash marks with one another. A 90-degree difference indicates a twisting of the liner within the shell. Liners that are twisted are unable to open and close correctly during pulsation, and therefore cannot milk out cows effectively.

Look for Signs of Overmilking or Inadequate Liner Compression/Pulsation

Employees should keep an eye out for changes on teats associated with overmilking or inadequate liner compression/pulsation. Often, employees will notice signs of cow discomfort, such as kicking at units, while milking. Overmilking occurs at the end of milking when a unit is attached and no milk is flowing.

Vacuum in the teat cistern can be as high as 90% of the cluster vacuum (Rasmussen, 2004). Also, overmilking causes teat end changes in as little as a couple of weeks, resulting in thickening of teat tissue (rough teat ends, hyperkeratosis) and vascular changes, such as congestion (stagnation of blood in the vessels) (Mein, 2001). Improper liner compression (“squeezing” of the liner against the teat for massage) or improper pulsation also reduces blood flow from the teat. This can lead to increased mastitis risk and impaired milk flow.

Know the Milking Vacuum Level

Sometimes loss in system milking vacuum can occur and impair milking efficiency. This can be avoided if employees understand system vacuum and check a properly functioning gauge at the start of each milking. Employees should have access to a functional vacuum

gauge in the parlor. When vacuum levels deviate from normal, an employee should notify a manager.

Align Units Properly to Reduce Liner Slips (Squawks)

Liner slips can occur from unstable vacuum in the milking system, improperly aligned (balanced) units, poor teat conformation, or liners that do not “match” teat size. Train employees how to hang and balance units. The milking unit should be perpendicular to a cow's udder, not hanging at an angle.

Open Air Vents for Proper Milk Flow

Employees are critical in keeping vents open by cleaning units. Depending on the milking unit, air vents can be on the cluster, the liner mouthpiece, or short milk tube. Having a source of air into the unit is essential for efficient milking and teat health. Employees play a critical role in keeping vents open by cleaning units.

Monitor Air Hose Condition

Worn or cracked hoses can lead to inefficient milking. Air hoses, just like every other piece of equipment, wear out over time. Most equipment dealers recommend changing air hoses on milking units every six months, or as needed, when cracks and other damage occurs. Cracks in hoses can lead to loss of vacuum in a milking system or improper pulsation.

Milking parlor managers should include routine equipment checks as part of employee training. Even small checks, such as making sure units are correctly aligned underneath the udder and air vents are open, can make a big difference.

These six points can take employees to the next level and help them better understand the tools of their trade. Lessons can be taught about teat health, basic machine maintenance, lag time, and oxytocin release. The more employees know, the greater the opportunity for their investment in a dairy operation. 

References

Mein, G.A., F. Neijenhuis, W.F. Morgan, D.J. Reinemann, J.E. Hillerton, J.R. Baines, I. Ohnstad, L. Timms, J.S. Britt, R. Farnsworth, N. Cook, T. Hemling. 2001. Evaluation of Bovine Teat Condition in Commercial Dairy Herds: 1. Non-Infectious Factors. in Proc. 2nd International Symposium on Mastitis and Milk Quality. Rasmussen, M.D. 2004. Overmilking and Teat Condition. Pages 169-175 in National Mastitis Council Annual Meeting. NMC

What's Standing Alfalfa Worth in 2017?

One of the challenges in coming up with a value for standing hay is the lack of established market price information like corn and soybeans. Another challenge is multiple cuttings of hay versus a single harvest for grains. So it's no wonder the price for standing hay can vary greatly between farms, even between fields. Here's one approach for pricing standing hay in 2017.

Assuming four ton dry matter (DM)/acre for the entire year of dairy quality alfalfa hay worth \$100 to \$150/ton baled (\$0.06 to \$0.09/lb DM), half the value is credited to the owner for input costs (land, taxes, seed, chemical and fertilizer), and half the value is credited to the buyer for harvesting, field loss and weather risk. Obviously, estimated yield is an important factor when negotiating price. This formula will help determine pre-season maximum alfalfa dry matter yield potential... $(0.10 \times \text{stems/ft}^2) + 0.38$. Actual yield will likely be lower due environmental conditions and individual harvest / management practices. Wait until stems are at least 4-6 inches tall and count only stems upright enough to be cut by the mower.

Using yield distribution based on recent multi-year UW-Extension field research in NE WI for a three cut (43% / 31% / 26%) or four cut (36% / 25% / 21% / 18%) harvest system, the following price range (rounded to the nearest \$5) may offer a starting point for buyers and sellers to negotiate a sale of good to premium quality standing alfalfa in 2017:

4 cut system	3 cut system
1st crop...\$85-130/a	\$100-155/a
2nd crop...\$60-90/a	\$ 70-110/a
3rd crop...\$ 50-75/a	\$ 60-95/a
4th crop...\$ 40-65/a	

In this example, the standing value for the entire alfalfa field could range from \$230 to \$360/acre for the entire growing season. Keep in mind ownership costs can run \$300- 400/acre when the seller considers lost rent, establishment costs and top-dress fertilizer to maintain soil fertility. That's why the same price is not always the right price for everyone. Ultimately, a fair price is whatever a willing seller and an able buyer can agree to.

To help farmers and landowners better evaluate their pricing options, Greg Blonde, UW- Extension Agriculture Agent developed a mobile app for pricing standing hay. With more than 1500 downloads and 600 users across the country, the app provides quick access to baled hay market prices for reference calculations, with value per acre by cutting displayed using annual yield and harvest cost projections. The Android app is free to download at the Google Play store (search for **Hay Pricing**) or by going to:



<https://play.google.com/store/apps/details?id=com.sma.rtmappsconsulting.haypricing>. 

May 8, 2017 Hay Market Price Report for Midwest

Hay Grade	Bale type	Price (\$/ton)		
		Average	Minimum	Maximum
Prime (> 151 RFV/RFQ)	Small Square	\$218.00	\$180.00	\$250.00
	Large Square	\$181.00	\$130.00	\$265.00
	Large Round	No Reported Sales		
Grade 1 (125 to 150 RFV/RFQ)	Small Square	\$120.00	\$100.00	\$140.00
	Large Square	\$130.00	\$100.00	\$160.00
	Large Round	\$85.00	\$50.00	\$130.00
Grade 2 (103 to 124 RFV/RFQ)	Small Square	\$126.00	\$112.00	\$140.00
	Large Square	\$95.00	\$70.00	\$120.00
	Large Round	\$64.00	\$50.00	\$80.00
Grade 3 (87 to 102 RFV/RFQ)	Small Square	No Reported Sales		
	Large Square	\$72.00	\$50.00	\$85.00
	Large Round	\$55.00	\$10.00	\$80.00

Assessing Alfalfa Winter Damage

Some alfalfa fields are having a rough time. Unavoidable winter injury was prevalent this spring. Consequently, it may not be surprising to find alfalfa plants with rotted crowns or roots. If new growth from the alfalfa crown appears delayed, yellow, or down right 'crappy-looking', it is a good idea to double check the health of the crown and roots.

Look For Symptoms.

Crown rot is caused by a complex of soil microorganisms that target plants that are older, stressed, damaged, or exposed to unfavorable environmental conditions. These organisms can infect and rot the crown and roots of alfalfa throughout the year.

Crown rot is generally described as brown, dead areas in the crown of the plant that can extend down through the cortex of the root (see Photo 1 below). At later stages of the disease, the center core may become completely rotted and hollow. As crown rot develops, plant vigor declines, and alfalfa plants begin to wilt and eventually die.

Assess Your Stand.

Start estimating your yield potential by counting stems. Dr. Dan Undersander and others with UW-Extension found greater than 55 stems per square foot will generally not limit yield, but if the field averages less than 39 stems per square foot, one should consider replacing the stand. It is always best to average stand

counts from three to five representative locations per field. After counting stems, assess the overall crown and root health at each location in the field. Dig 5 plants, deep enough to capture about 6 inches of the crown. UW-Extension Team Forage publication, (A3620) located at <http://fyi.uwex.edu/forage/alfalfa-stand-assessment-is-this-stand-good-enough-to-keep/>, has a guide for assessing whole plant health.

Determine Management Strategies.

Is it time to renovate your existing alfalfa stand, recover what you can, or rotate to another crop? Different management strategies may 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. A helpful tool for calculating your risk for winter injury and determining what management practices to select can be found at: <http://fyi.uwex.edu/forage/evaluating-and-managing-alfalfa-stands-for-winter-injury/>.

First, decide the extent of crown rot damage and yield potential of your field. Then based on your farm and forage needs, decide when and what options you need to take. **Photo: Alfalfa Crown Rot** 



L. Ortiz-Ribbing

Promote Public Access and Receive Incentives

George Koepp, UW-Extension Columbia County

The Voluntary Public Access and Habitat Incentive Program, administered by the Wisconsin Department of Natural Resources (DNR), with funding from the U.S. Department of Agriculture's Natural Resources Conservation Service, is currently enrolling new properties in 52 eligible counties throughout Wisconsin. Enrolled landowners can earn income through opening their property to year-round public hunting, fishing, trapping and wildlife observation.

Lease rates vary by land cover, ranging from \$3/acre for agricultural land, \$10/acre for grassland or wetland and \$15/acre for forest land. VPA leases will expire on Aug. 31, 2020. Landowners participating in other conservation programs are encouraged to apply, including:

- Conservation Reserve Program (CRP)
- Conservation Reserve Enhancement Program (CREP)

Continued on Next Page ➤

- Environmental Quality Incentives Program (EQIP)
- Wetlands Reserve Easement (WRE)
- Managed Forest Law (MFL)

Technical assistance and financial incentives are available to enrolled landowners who implement recommended wildlife habitat practices. VPA landowners reported very high overall satisfaction with the program in 2016. Little is required for enrolled landowners beyond providing for public access. Under state statute, landowners are generally immune from liability for injuries received by individuals recreating on

their lands. DNR provides compensation for damages to property or crops that occur as a result of opening land to public access.

To find out more information and to apply to enroll in the VPA-HIP program, visit our website at: <http://dnr.wi.gov/topic/lands/VPA/index.html>. Interested landowners should also contact Anne Reis, DNR VPA-HIP Coordinator, for more information at 608-279-6483 or via email at Anne.Reis@wisconsin.gov. 

Black Cutworm Update

The potential for Black Cutworm (BCW) flight this growing season has been in the news. Thankfully, we can rely on our agricultural partner, DATCP!



Although it is hard to know if these pheromone trap catches will result in field damage, here are a few “bullets” to remember.

- **There may be several BCW generations in WI.** Field corn is only susceptible to the migrating (first) generation. Sweet corn’s range of planting dates is a different story.
- **BCW adult females are attracted to the following sites to lay eggs.** Good places to spot check: Fields with significant soybean residue, low growing broadleaf weeds, or low lying (wet) field areas.
- **Larval ID.** Up to 2 inches long. Often by damage found and by ruling out other insect pests.
- **Adult ID is not important** unless you are monitoring a black light and/or pheromone trap.
- **Early detection is important.** BCW larvae can cut several plants before pupating.
- **BCW larvae usually are nocturnal feeders.** Unless it is cool and cloudy.
- **There are 7 larval instars.** Larval cutting usually starts when at least ½ inch but depends on corn development. See [A3646](#) for a larval head capsule (instar) guide and damage potential for corn.
- **Damage symptoms.** Photos can be seen on our county website at <http://fyi.uwex.edu/fdlag/2017/05/18/black-cutworm-update/>.

- **Larvae spend the day in the soil.** Use a knife to slowly excavate soil from the base of the damaged plant and up to a 2 inch radius. Larvae are often found at the juncture of dry/wet soil.
- **Economic threshold.** WI threshold = 5% damaged plants. With current corn price, it is not advised to use a lower threshold. Also be able to find larvae in the field or do not treat. Check stage, if the population has pupated, there is no way to prevent yield damage.

Scouting: Assess damage accurately/unbiased. Count damaged plant numbers in 5 random sets of 50 plants. Spot treating may be possible if BCW populations are clumped in their distribution.

Treatment: Many insecticides are labeled for black cutworm (cutworm, spp.) on corn. However, if using a synthetic pyrethroid (IRAC Class 3A) (i.e. Warrior II, Mustang, Brigade, etc.), do not cultivate after treatment. These insecticides are bound by soil and control will be compromised. If considering using chlorpyrifos (Lorsban and other generic formulations), read both the insecticide and herbicide label first! Potential crop damage many prohibit post emergence use. Other herbicide labels may have more restrictions on chlorpyrifos, as well.

- **BCW look a likes.** See website for listing
- **Above ground traited corn:** All should be scouted. The Cry1F and Vip3A are two proteins listing BCW control. However, under heavy populations significant damage may be seen.
- **Other susceptible hosts:** Many, including vegetables and turf.

Modified by Dr. Loretta Ortiz-Ribbing from Dr. Byran Jensen, UW IPM Specialist. For the complete unabridged text, see our website. 



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

Mark Your Calendars for Up Coming Agricultural Events

May 2017

20 Sa **Shoreline Protection & Restoration Workshops**, 9:00 a.m. - 1:30 p.m., The Watermark, 209 South Center Street, Beaver Dam

June 2017

7 W **Livestock Skillathon**, 6:00 p.m., Fond du Lac County Fairgrounds

14 W **Forage Council Twilight Meeting**, 6:30 p.m. - 9:00 p.m., Dodger Acres (Madigan Farm), W10734 Schmold Rd, Rosendale **(See enclosed flyer.)**

14-15 W- Th **4-State Dairy Nutrition & Management Conference**, Grand River Conference Center, 500 Bell Street, Dubuque, Iowa

25 Su **Fond du Lac AC Agri-Business Council Breakfast on the Farm**, 8:00 a.m. - noon, Daane Dairy, W11729 Hemp Rd, Brandon

July 2017

11-13 Tu - Th **Farm Technology Days**, Ebert Enterprises, Kewaunee County, E5083 Co Rd K, Algoma, WI

19-23 W - Su **Fond du Lac County Fair**

For additional dates and information, visit <http://fyi.uwex.edu/fdlag/calendar>
