



# CHIPPEWA VALLEY AGRICULTURAL EXTENSION REPORT

## Dunn County – 715-232-1636

Katie Wantoch – Agriculture Agent  
Specializing in Economic Development  
<http://dunn.uwex.edu>

## Eau Claire County – 715-839-4712

Vacant – Agriculture Agent  
Erin LaFaive – Horticulture Educator  
<http://eauclaire.uwex.edu>

## Chippewa County – 715-726-7950

Randy Knapp – Agriculture Agent  
Jerry Clark – Crops & Soils Educator  
<http://chippewa.uwex.edu>

## Volume 3 Issue 3

## Summer 2013

### In this issue:

- 2 Randy's Rumors: Starch Digestibility
- 3 Jerry's Jargon: Is This Alfalfa Stand Good Enough to Keep?
- 4 Pasture Weed Management after a Drought
- 5 Maximizing Forage in Winter Injured and Killed Stands
- 6 Wisconsin Farm Technology Days in Barron County
- 7 Calendar of Events

### WI Farm Fun Facts

- 90% of Wisconsin's milk is made into cheese and 90% of that famous Wisconsin Cheese is sold outside of the state's borders.
- Cheese is the #1 food craving, even beating out chocolate! When respondents were asked which food gift they would like to receive, 19% of Americans said they want cheese.

## Upcoming Meetings—contact local Ag Agent for more info:

### June is Dairy Month!

Visit [www.dairydaysofsummer.com](http://www.dairydaysofsummer.com) for information on events, recipes and farm breakfast to celebrate June Dairy month!

**June 25—Resistance Management Crop Care Clinic, Eau Claire and Dunn County,** UW-Extension will be holding a "Resistance Management Crop Care Clinic" on Tuesday, June 25, 2013, in the morning in Eau Claire County and from 1:30 – 4:00 pm in Dunn County. Dunn County's meeting will be held on the Paul Harrison farm near Menomonie. There is no cost to attend. Crop Care Clinics are designed to sharpen basic crop management skills as well as introduce new skills to producers. This is not a traditional field day. Crop Care Clinics have been designed to be primarily in the field and "hands-on" training. Presentations will include various pre and post emergent fertilizer applications, insect management, and troubleshooting corn and soybean production problems, including late-day planting and hail damage. Please visit UWEX websites for more information on each event.

**July 9-11—Wisconsin Farm Technology Days, Barron County,** The largest annual WI outdoor farm show will be held at the Breezy Hill Dairy farm in Dallas, WI this summer. Make plans to attend & read page 6 of this newsletter for more information on farm owners Alex and Mary Olson. More information at [barronfarmtech.com](http://barronfarmtech.com)

**Interested in volunteering at Farm Technology Days?** Katie Wantoch is seeking volunteers to assist as farm tour guides and providing information to attendees about the host farm during guided wagon tours. Volunteers are asked to work 4 hour shifts and receive free entrance into the event on the day that they volunteer. Please contact Katie if you are available — [katie.wantoch@ces.uwex.edu](mailto:katie.wantoch@ces.uwex.edu) or Dunn County UWEX 715-232-1636.

## Randy's Rumors . . .



Randy Knapp  
Chippewa County Agricultural Agent

### **Starch Digestibility**

Starch digestibility can affect milk production and profitability. Corn starch digestibility can be highly variable. Particle size, grain processing, moisture levels, and storage methods are some factors affecting starch digestibility.

Last winter, UW-Extension conducted the *Manure Starch Analysis Study* to determine how much starch content and digestibility changed after corn has been stored and fermented over winter. Not only was starch content of corn feedstuffs evaluated, but also fecal starch content. A reasonable goal for fecal starch in high producing cows is five percent or less. Research by Dr. James Ferguson, University of Pennsylvania, estimates for each one percentage unit increase in fecal starch above five percent, a decline in milk yield of about one pound per cow per day can be expected.

The field study suggested corn silage digestibility improved with extended time in storage, seven percentage units higher digestibility in the spring of 2012 as compared to the previous fall. This improved digestibility is also supported by UW research, which showed after ensiling corn silage for 240 days, digestibility increased. The increase was attributed to the breakdown of zein proteins, the cross-links holding starch granules together.

What can a farm do to increase starch digestibility? Allowing corn silage or high moisture corn to stay in storage longer improves starch digestibility. Dry matter content and particle size also have an impact. The following are opportunities to help improve corn starch digestibility:

- **Leave corn silage in storage longer to improve starch digestibility.**
- **Harvest corn silage at a lower dry matter content with 40% DM being the goal.** Harvest of corn silage with 40% or greater dry matter content can reduce corn starch digestibility.
- **Increase kernel processing at harvest.** Starch digestibility is reduced as particle size increases. It is recommended for particle size of high moisture corn to be 2,000 microns or less. For

corn silage, the goal for kernel processing score should be 50% or more of the kernels damaged.

- **Improve control of moisture levels at the time of high moisture corn harvest.** Fermentation and starch digestibility of high moisture corn silage decreases as dry matter content increases. Ideally, high moisture corn should be ensiled at 75% dry matter or less.
- **Grind dry corn to a fine particle size.** Based on 2012 research by UW-Extension Dairy Nutritionist Pat Hoffman, dry corn should be ground to a fine particle size (550±60 micron).

Measuring starch in the manure is a tool you can use on your farm to help identify if starch digestibility is limiting milk production in your herd. Excess starch (greater than five percent dry matter basis) means not only decreased milk production, but also money wasted on feed being passed through the cow and not being digested. Since milk yield losses can be significant, it is wise for farms to look for ways to improve starch digestibility of their ration. With fermented feeds, especially corn silage, research shows extra time in storage can make an impact on starch digestibility.

For further information on dairy cattle nutrition, please contact your local Extension Office.



*Adapted from: Dairy Frontier Newsletter,  
Tina Kohlman, Dairy and Livestock Agent*

## Jerry's Jargon

**Jerry Clark**  
**Chippewa County Crops & Soils Educator**



### *Is this alfalfa stand good enough to keep?*



With a long winter and cold temperatures still hanging around, alfalfa fields are taking their time greening up. We had plenty of snow cover which usually lowers the risk of winterkill or injury. However, winter rains which caused ponding and ice to form in alfalfa fields is the one factor that could cause extensive injury or death to alfalfa plants. Now is the time to assess alfalfa fields to determine the amount of winter injury, if any has occurred. Keep in mind the points listed to below to help you assess alfalfa fields this spring.

Slow Green Up - One of the most evident results of winter injury is that stands are slow to green up. If other fields in the area are starting to grow and yours are still brown, it is time to check those stands for injury.

Asymmetrical Growth - Buds for spring growth are formed during the previous fall. If parts of an alfalfa root are killed and others are not, only the living portion of the crown will give rise to new shoots resulting in a crown with shoots on only one side or asymmetrical growth.

Uneven Growth - During winter, some buds on a plant crown may be killed and others may not. The uninjured buds will start growth early while the injured buds must be replaced by new buds formed in spring. This will result in shoots of different height on the same plant, with the shoots from buds formed in spring several inches shorter than the shoots arising from fall buds.

Root Problems - The best way to diagnose winter injury is by digging up plants and examining roots. Healthy roots should be firm and white in color with little evidence of root rot. Winter injured roots have a gray, water soaked appearance and/or a brown discoloration due to roots rots. If the root is soft and water can be easily squeezed from the root it is most likely winter killed. If the root is firm but showing signs of rot it may still produce, depending on the extent of injury. If over 50% of the root is damaged, the plant will most likely die that year. If less than 50% is injured the plant will likely survive for 1 or maybe 2 years depending on management and subsequent winter weather.

Also, while assessing for winter injury, take a stand count to determine if there are enough healthy plants to make the field productive.

Stems/ft <sup>2</sup>	Action	Predicted Yield Potential (Assuming no winterkill)
>55	Stem density not affecting yield	Same as current year
40-55	Some yield reduction expected	If good health same as current year. If >30% root injury then significantly less
<39	Consider replacing stand	If good health same as current year. If >30% root injury then significantly less

## Pasture Weed Management after a Drought

Mark Renz, Extension Weed Scientist, University of Wisconsin-Madison

Although spring precipitation has alleviated some concern about a continued drought, we can expect some lingering effects in 2013. Many pastures last summer were overgrazed, and only the weeds remained green until the late rains in September. I expect the combination of slow regrowth this spring and overgrazing of pasture forages last year will result in significant changes in pasture plant composition in 2013, with the potential for weed species to increase. Below are several management practices to consider in pastures related to weed management.

Pastures that were overgrazed in 2012 had little residual cover present over the winter (<4 inches). Because of this we will likely see increased seed germination this spring. These species germinating may be weeds or desirable plants such as clover, so early identification will be important to determine what species are present. Once this information is available, a management plan can be developed based on the weed and its density in your pasture. Unknown plants should be identified as these could be toxic or regulated invasive plants, both of which should be controlled immediately. There are several weed identification resources identified at the end of this article.

**If poisonous plants** are found, avoid animal contact with plants, especially when limited forage is available (early spring). We recommend removing animals from areas with highly toxic plants and controlling populations with the appropriate management at the correct stage of growth. This could be well into summer depending on the species. If using an herbicide to control the poisonous plant, make sure to keep animals off the treated area for at least 14 days to allow the foliage to senesce. Herbicides can increase the palatability of many poisonous plants, increasing their intake, and resulting in animal toxicity, a situation that can be avoided by delaying turnout. Not sure what the common poisonous plants in Wisconsin are, or what the symptoms of poisoning might be? See: <http://www.uwex.edu/ces/crops/uwforage/PoisonPlants8-12.pdf>

**Canada thistle and other perennial weeds** will likely also be more common in 2013. Canada thistle is of the greatest concern as this plant can greatly reduce forage productivity and utilization of forage grasses. I suggest intensive scouting and management of Canada thistle and other perennial pasture weeds (e.g. horsenettle, hoary alyssum) to prevent spread. See weed management resources below for more information on control options for perennial weeds.

**Biennial weeds** like plumeless thistle, wild carrot (Queen Anne's lace) and burdock will likely germinate in high numbers this spring. As biennials require a year of overwintering to flower, I don't expect to see dramatically larger flowering populations until 2014 as plants will be seedlings and rosettes in 2013. While competition with desirable forages may not be critical this year, plants should still be targeted for management as controlling these plants as rosettes is the most effective strategy. See weed management resources for more information on control options for biennial weeds.

**Annual weeds** that are common in annual row crops will be more common in pastures in 2013 (e.g. lambsquarter, ragweed, yellow foxtail). These will start germinating from mid-April through June and have the potential to continue germinating through August. See the weedometer for germination timings of specific weed species: <http://weedecology.wisc.edu/weedometer/>. Annual weeds are most problematic in continually grazed pastures, as they are rarely eaten in continuously grazed situations and deter animals from feeding on desirable forage growing among the weeds. Rotationally grazing your animals can alleviate many of the negative effects of these species if timed correctly. Most broadleaf weeds have good forage quality if eaten before they flower. Encourage animals to feed on broadleaf plants before they flower to prevent seed production and maximize forage quality. Broadleaf herbicides can also be used to suppress populations. If the correct herbicide is selected and applied at the correct time, one can expect effective removal without harming established grasses. However, these herbicides will also injure desirable legumes in the pasture, so if desirable legumes are common in the pasture, avoid broadcast spraying.

Annual grasses will also be more common, especially yellow foxtail. While annual grasses can be grazed like broadleaf weeds (before they flower), their forage quality is low. No herbicides are registered for use to control annual grasses in Wisconsin pastures, therefore the best approach to manage these plants is to prevent emergence and promote the growth and competitiveness of the desirable forage present. To prevent emergence of annual grasses and broadleaf weeds leave a minimum of 6 inches (8 inches is ideal) of forage in the pasture (residual or actively growing) when germination of the weed occurs. This can be difficult to accomplish for some species as they can emerge throughout the entire growing season.

**Clovers:** In addition to weeds, I expect this year to have high levels of clover emergence due to limited residual cover and reduced competition from existing forage. While many graziers add clover seed to pastures periodically, these legumes have a hard seed coat that allows them to survive in the soil for many years. So even if clover seed was not added for several years there is a chance that clover will germinate and appear in your pasture. Some of these clovers will likely be desirable (e.g. red clover), while others may not (e.g. prostrate, feral white clover). If desirable clovers are present, manage weeds and desirable forage so that they do not out-compete establishing clovers. This can be done with grazing, or clipping/mowing. Typically clovers readily establish as long as they get an opportunity to emerge and develop a root system. I expect the slow regrowth of pasture grasses and low residual cover will be enough for good establishment in most pastures. Avoid over-grazing these areas, especially in spring, as this can reduce establishment. Also avoid broadcasted herbicides as they will injure or kill establishing clovers.

In addition to these weed management tips, several agronomic practices will help alleviate some of the effects of the drought. Please refer to this excellent publication from UWEX grazing specialist Rhonda Gildersleeve for information on assessing pasture condition, soil fertility, grazing management, and pasture renovation options: <http://fyi.uwex.edu/grazres/files/2013/03/Spring-Pasture-Mgt-Tips2013final.pdf>

## Maximizing Forage in Winter Injured and Killed Stands, Spring of 2013

Dan Undersander, Extension Forage Agronomist

If you are encountering significant alfalfa stand damage, including low spots only in fields to significant portions of the fields, UW Agronomist's recommend the following:

1. First make sure that "dead" spots are actually dead and not just delayed:

a. Dig a few plants and check the top 4 inches of the tap root for color and turgor. It should be an off white (like the inside of a potato) and turgid (not roty). If plants are off white and turgid they are alive and just delayed.

b. Also check fields that are putting out small shoots. Sometimes the dying plants will produce shoots 1 to 2 inches tall and then die. Again, dig a few plants and look for off-white and turgid taproots.

2. Determine the percentage of field affected and manage accordingly:

a. If small percentage, simply go over the affected areas with a drill as soon as possible and seed 10 lb/a with a 50/50 mix of Italian (annual) ryegrass and perennial ryegrass.

b. If a moderate percentage of the field affected and wanting to take first cutting and then reseed – immediately interseed Italian ryegrass (10 lb/ac), take first cutting and then seed corn for maximum yield. An alternative in the southern half of the Wisconsin (especially if expecting dry conditions) would be to seed BMR sorghum-sudangrass (20 lb/ac). Oats should be seeded for forage after Aug 1.

c. If a large percentage of the field is affected,  
i. For rapid forage production to replace first cutting alfalfa - seed oats (2 bu/ac) and peas (20 lb/ac) for haylage harvest. This can be with alfalfa seeded underneath (if seeding into a field not previously in alfalfa) or it can be seeded into damaged alfalfa field and followed with corn for silage or BMR sorghum-sudangrass for silage, baleage, or hay.

ii. For most season long yield - seed corn or BMR sorghum-sudangrass before July 1 (20 lb/ac). Corn will likely produce the most tonnage of any forage. Sorghum-sudangrass is a good choice if you expect dry conditions and/or above average temperatures. Alfalfa can be seeded into a different field at 10 to 12 lb/ac with 6 lb/ac tall fescue and 2 lb/ac Italian (annual) ryegrass. Alternatively one can overseed the alfalfa with oats (2 bu/ac) and peas (20 lb/ac). The annual ryegrass or oats/peas cover crop will maximize production in the seeding year.



July 9-11, 2013



## **Make Plans to Attend the Wisconsin Farm Technology Days in Barron County! July 9-11, 2013**

Alex Olson began dairy farming in 1981 with his parents following his graduation from Barron High School. From that time until today, the farm has grown progressively as opportunities became available and the dairy industry in Barron County changed. Alex, and his wife Mary, gradually took over management and ownership of the farm from his parents and then began to steadily grow the dairy herd and expand their land base.

The Olson's first expanded the dairy herd from 70 cows to 110 cows and then to 300 cows by 2003. A fire destroyed their milking parlor in 2007. The Olson's overcame this setback and built a new milking parlor and added more dairy cows again. Breezy Hill Dairy now has 485 black and white and red and white Holsteins and some Jerseys.

According to Alex Olson, cows are the number one priority at Breezy Hill Dairy. Cow comfort, herd health and good employee management are what the Olson's focus on every day. "We strive to provide a healthy environment for our cows and a safe place for our employees to work," says Alex.

The Olson's "never imagined in a million years," they would someday host Wisconsin Farm Technology Days. Mary Olson says that "Living in such a beautiful part of the country, where there are many well-managed farming operations, we are humbled to be selected as

hosts for the 2013 Farm Technology Days in Barron County."

Mary Olson is active in the management and operation of Breezy Hill Dairy. Her primary responsibilities include purchasing, medications, recordkeeping and "just about anything else that needs to be done." Mary developed the employee handbook and procedures manual and drives tractor if needed. She also loves flowers. According to Mary, "There are going to be lots of flowers on this farm during Farm Technology Days in 2013."

When asked why he wanted to host Farm Technology Days, Alex Olson said, "This part of Barron County is beautiful and we have really good farms in this area. We want everyone in Wisconsin to know that." Olson went on to say, "So many people stepped forward to help us after our parlor fire, we want to give something back to the community. Hosting Farm Technology Days is one way that we can do that."

### Farm Description

- Breezy Hill Dairy, 147 16th St., Dallas, Wisconsin 54733
- Dairy enterprise: 485 Holstein dairy cows, both black & white and red & white, plus some Jersey dairy cows. 30% of the herd is registered. 400 dairy replacements of various ages are all raised on the farm
- Cropping enterprise: 680 acres, 625 acres tillable, 200 acres irrigated – 320 acres of forages and 305 acres of corn

**More information at [barronfarmtech.com](http://barronfarmtech.com)**



## CALENDAR OF EVENTS

### MAY 2013

**29** Wisconsin Farm Technology Days Media Day, Dallas, WI area

### JUNE IS DAIRY MONTH:

**8** Dunn County Dairy Breakfast, Denmark Dairy, Dennis & Karl Kragness Farm, Colfax

**14** Breakfast in the Valley, Eau Claire County Expo, Eau Claire

**19** Chippewa County June Dairy Day's Farmer Appreciation Dinner, Northern WI State Fair

**8** Dunn County Master Gardener Assn Plant Sale, Location TBD

**17-20** Dunn County 4-H Tractor & Machinery Safety Training, Menomonie Middle School

**17-20** Chippewa County Tractor Safety, Cadott high school 8am - 2pm

**17-20** Chippewa County Tractor Safety, Bloomer high school, 8am—2pm

**25** UWEX Resistance Management Crop Care Clinic, Eau Claire & Dunn County

### JULY 2013

**9-11** Wisconsin Farm Technology Days, Barron County—Breezy Hill Dairy, Alex & Mary Olson, Dallas, WI area

**10-14** Northern Wisconsin State Fair, NWSF fairgrounds, Chippewa Falls

**13** Eau Claire County Clean Sweep, WRR Environmental Services, Eau Claire

**24-28** Dunn County Fair, Dunn County Recreation Park Menomonie

**24-28** Eau Claire County Fair, Eau Claire Expo Center, Eau Claire

### AUGUST 2013

**1-11** Wisconsin State Fair, West Allis

**24** 6th Annual Chippewa Valley Farm-City Day, Five Star Dairy, Elk Mound

### SEPTEMBER 2013

**11** Dunn County Hazardous Waste Collection, Colfax fairgrounds

**12** Dunn County Hazardous Waste Collection, Dunn County Transfer Station, Menomonie

**14** Eau Claire County Clean Sweep, WRR Environmental Services, Eau Claire



For statewide UW-Extension agriculture events, please visit <http://bit.ly/ANRECalendar>

