

# Agricultural Newsletter

UW-Madison College of Ag & Life Science  
University of Wisconsin-Extension



April-May-June 2001  
Volume 7, Issue 2

## Inside this Issue

- 1 Milk Prices - Good news and great news
- 2 By-product lime update
- 2 What is the best date to plant corn?
- 4 Notes from Dairy L
- 4 Grazing and feeding considerations for dairy
- 5 Meat Marketing Workshop to be held
- 5 This quarter's events
- 6 Winter 2000-01 summary
- 6 Internship available at the Spooner Ag Research Station
- 7 Are you eligible for Badger Care?
- 7 Concerned about high nitrogen/low crop prices?
- 7 Promote daytime calving

## Milk Prices

### *Good News and Great News*

*Bill Saumer*  
*Area Agricultural Agent*  
*Burnett, Sawyer, & Washburn Counties*

Many people besides farmers have been following commodity prices over the past several months and everyone knows how bad milk prices were for most dairy producers in 2000. The good news is that many factors that affect milk prices are positioning themselves for much better milk prices later this year and we have already seen major improvements.

Cow numbers across the nation finally started to decrease slightly after continuous growth for almost all of 2000. This decrease in cow numbers combined with a more significant factor of decreased milk produced per cow has lowered total production and has been a major reason for price improvements. There are many other factors that are creating problems in other states, but the net effect for dairy producers in the Midwest is that prices continue to improve for the coming months and currently peak in September.

This is really good news, but unfortunately, many producers have not been able to ride out the extended period of low prices and are no longer milking cows. For others, the good milk prices on the way are too little, too late and they may not be able to continue either. There are many producers, however, that either were prepared for the past lower prices and were able to remain profitable by running a "tight ship" on their farm or they had employed a milk marketing strategy in 1999 that gave them favorable prices in 2000. I certainly hope that all dairy producers can read the writing on the wall and will take advantage of the excellent pricing opportunities that are improving daily and should be around for the next 4-5 months.

The farmers who attended our milk marketing sessions really understand what is an excellent price for their own farm and they will be able to greatly help out their profits by taking some action this year. There are many different strategies to use. Some creameries and processors have taken action and offer contracts to the farmer. Others have lined up contacts making it easier for dairy producers to understand certain opportunities and to take advantage of them.

This is the great news. Not that the prices are getting better, but that farmers can really help themselves a lot by employing a price protection strategy for the months following these expected good prices. Just because things really look good for the coming months, do not let your guard down and not do anything, because next year could be like 2000 and we know how bad that was!

If, as a dairy producer, you were not able to attend our milk marketing sessions and you have questions as to what might be a great opportunity for your farm, call me and we can work on an individual personalized strategy for you. Remember, the better milk prices on the way will remain only good for you and won't become great if you do not take some action! Knowing what action is best for you is the key.

# By-product lime update

*University of Minnesota Carlton County Extension Office*

For the past 12 years, farmers in north-east Minnesota and northwest Wisconsin, have been able to contact the Carlton County Extension office to be placed on a list to receive by-product lime. Cutler Magner lime fines is an affordable high quality product. It has been available as a liming source for a number of years, but usually the demand has exceeded the supply. Not now--the waiting list is less than three months. Loads are delivered with a semi-end dump with loads averaging 23 tons per load. Supplying a suitable site for stockpiling and snow plowing a site is your responsibility. Since this is different from regular aglime, you will need to apply about twice as much. The price listed is based from Superior, Wisconsin. One way mileage for 50 miles is \$3.50 / ton, 60 miles is \$4.25 / ton, 70 miles is \$5.25 / ton. For example: 23 tons at 50 miles @ # 3.50 ton = \$80.50 per load.

Another new by-product lime from Proxair, is also available for soil pH correction on agriculture cropland. It is called calcium hydroxide lime. It is a great lime, easy to handle, and has no dust associated with it. Calcium Hydroxide lime is a lime created from regular quarry lime, which is calcium carbonate and is made into ag lime. To create calcium hydroxide lime, the calcium carbonate lime is heated to approximately 3700°F to strip the carbonate portion out for the creation of carbide. The carbide is then manufactured into acetylene gas. The lime left over is a hydroxide lime which has a pH molecule attached to the calcium and therefore, called calcium hydroxide. It is a very pure lime and reacts quickly to the soils to alter soil pH. Spreading calcium hydroxide lime can be done with on-farm equipment like a manure spreader. The calcium hydroxide lime handles very nicely. There is no dust. It has a moist, granular texture and will feed through any conven-

tional manure spreader, side discharge, any auger type spreader, or side slinger. A slow carrier-chain speed is required and ground speed is increased to achieve a 4-6 ton per acre application. What is the cost to get calcium hydroxide lime? Trucking is the only cost. The lime itself is free. You need to apply 2.1 tons of Proxair lime to equal one ton of regular aglime. Loads are in 24-ton lots or truck loads. The trucking cost is all you pay for. It is based on miles from the load-out site, location in West Duluth. Mileage cost is listed on a per ton basis. 50 mile radius at \$8.00 / ton (per 24 ton truck loads), 60 miles radius at \$9.00 / ton, 70 mile radius at \$11.00 / ton.

How do I order these by-product limes? Through the By-Products Program, University of Minnesota, Carlton County. If you want to order, or have any questions, or would like additional information simply call 1-800-862-3760 extension 223; ask for Dale or Cindy.

## What is the best date to plant corn?

*Mike Bertram  
Asst. Superintendent  
Spooner Ag. Research Station*

A question that often has been discussed is: What is the best date to plant corn? Some people will tell you "When oak-tree leaves are the size of squirrel's ears." Others plant based on a date circled on the calendar. There has been a push in recent years to plant earlier and earlier. This question has been researched many times, including several studies at the Spooner Ag. Research Station.

First of all, what are the benefits and risks of early planted corn? According to the book "Modern Corn and Soybean and Production" (Hoeft, et al., 2000), some benefits include:

- earlier flowering, so grain fill occurs when days are longer, providing more solar radiation for dry matter production.

- earlier pollination may occur before soil moisture reserves are depleted, getting corn through these critical periods of high temperature and moisture stress.
- earlier maturity in fall, which leads to better drydown, more harvesting efficiency, lower drying costs, and less chance of early frost damage
- a better chance for timely fall tillage or manure application

Early planting has also been noted to provide stronger roots and stalks and a lower ear height, which may reduce lodging. Greater early season growth also provides an earlier shading of the soil, which can aid in weed control and decrease water evaporation.

There also are some risks associated with early planting:

- Cold, wet soils increase the time needed for emergence, which lead to a greater chance of soil crusting, disease, and insect problems.
- Late season weed control may be difficult because herbicides need to remain active longer due to later emergence of weeds relative to the corn.
- There is a greater chance that plants may be damaged by a late-spring frost.

In Spooner, the median date of the last 30-degree night is May 19 and 32-degree night is May 27.

A corn kernel contains enough reserves to feed a seedling for about 21 days. By this time the root system needs to be sufficiently developed to provide nutrition. Most corn hybrids will not germinate if soil temperature at 2 inches deep is below 50° F and still grow slowly at 55° F temperatures. Soil temperatures can fluctuate up to 10 to 12 degrees during the day, but a soil temperature of 50° F at 7 a.m. or 55° F at 1 p.m. should assure that temperatures are suitable for germination and growth for at least several hours during the day. Likewise, daily average air temperatures of 55° F sustain seedling growth.

A study conducted from 1991 to 1994 compared corn hybrid response to planting date

at six Agricultural Research Stations in Wisconsin (Lauer, et al., 1999). In Spooner, the experiment was planted on non-irrigated silt loam soil. Six planting dates ranged from April 22 to June 17 and were spaced about 7 to 10 days apart. At each planting date, a full-season (85 to 90 day relative maturity) hybrid and a shorter-season (80 day r. m.) hybrid were planted. Grain yield and moisture were collected in fall and an economic comparison was computed.

For Spooner the optimum planting date for a full-season hybrid was May 8. Yield for this date was 102 bu/A. Planting as late as May 15 still resulted in 95% of this yield, but harvest moistures increased. The predicted daily average yield change between April 24 and May 8 was +0.8% per day. The daily change was -0.8%, -2.2%, and -3.8% for planting dates of May 8 to May 22, May 22 to June 5, and June 5 to June 19, respectively. The optimum planting date for a shorter-season hybrid was May 11. Yield for this date was 96 bu/A. Planting as late as May 18 still resulted in 95% of this yield. The predicted daily average yield change between April 24 and May 11 was +0.6% per day. The daily change was -1.7% and -3.5% for planting dates of May 11 to June 5, and June 5 to June 19, respectively. Because yield was near 100 bu/A, each % corresponds to roughly 1 bu/A at Spooner.

Averaged across the northern locations of Wisconsin (Ashland, Marshfield, and Spooner), the optimum planting date of a full-season hybrid ranged between May 8 and May 12. The grain yield daily change ranged from +0.1 to 1.3% from April 24 to May 8 and -0.5 to -0.9%, -2.1 to -2.2%, and -3.4 to -3.7% per day for planting dates of May 8 to 22, May 22 to June 5, and June 5 to 19, respectively. The optimum planting date of a short-season hybrid ranged between May 12 and May 14. The daily grain yield change ranged from +0.6 to 1.6% from April 24 to May 8 and -0.2 to -1.7%, -1.7 to -1.9%, and -3.2 to -3.5% per day for planting dates of May 8 to 22, May 22 to June 5, and June 5 to 19, respectively.

Harvest moisture increased with later planting date. Factoring in drying costs, grower returns in dollars per acre tended to peak at

the May 10 to 12 planting dates. For most farmers, it is not possible to plant all their corn in a day, so it must be spread out. Waiting until the optimal date could result in a week of rain, delaying planting for two weeks. Planting from May 1 to May 10 tended to maximize yields, reduce drying costs, and maximize grower return.

Another study conducted during the 1998 and 1999 growing seasons evaluated date of planting and hybrid influence on corn silage and corn grain yield. Two hybrids (80 and 90 day r. m.) were planted on irrigated sandy loam soil on six dates. Partial data are presented in the table below. For many of the measurements, hybrid showed no effect. Date of planting did affect several measurements.

Grain yield was greatest at the May 3 planting date in 1998 and the early dates in 1999. It decreased the later corn was planted. Total silage yield also showed a similar effect with early May planting resulting in high yields and late May and June planted corn yielding less silage. Crude protein increased with later planting date in 1998, but

was not affected in 1999. ADF and NDF also tended to increase with later planting date (data not shown). Milk per ton and milk per acre are an estimate of potential milk production based on yield and quality and were calculated with the Milk 95 program. They are generally greater in earlier planted corn than in late planted corn.

A calendar date can give a good idea of when to plant corn. However, field conditions are more important than a given calendar date in this climate. Planting into a seedbed that is too cold, wet, or not properly prepared can set the corn back more than losing some heat units. If corn is planted early, population may need to be increased to maintain a good stand.

#### References:

- Lauer, et al., 1999. Corn hybrid response to planting date in the northern corn belt. *Agron. J.* 91:834-839.
- Hoefl, et al., 2000. Planting Decisions and Operations. *In Modern Corn and Soybean Production.* p 81-105. MCSP Publications.

Date of Planting Influence on Corn Grain Yield and Silage Yield and Quality at Spooner, 1998-99.

Planting Date	Grain Yield	Silage Yield	Silage Milk per	
			Ton	Acre
1998	bu/A	tons dm/A	lbs/T	lbs/A
April 27	153 b	7.71 a	2352 a	18059 a
May 3	172 a	8.19 a	2289 a	18790 a
May 14	112 c	7.62 ab	1653 b	12648 b
May 28	100 cd	6.94 b	1630 b	11248 b
June 11	96 cde	5.98 c	1209 b	7468 c
June 23	79 e	4.81 d	1233 b	5928 c
Mean	119	6.88	1728	12377
LSD	18	0.71	453	3722

Planting Date	Grain Yield	Silage Yield	Milk per	
			ton	acre
1999	bu/A	tons dm/A	lbs/T	lbs/A
April 19	149 ab	8.77 ab	1956 ab	17206 a
May 2	163 ab	9.48 ab	1731 b	17005 a
May 17	134 b	8.3 b	1704 b	14335 a
May 31	103 c	8.41 b	2040 a	17202 a
June 13	75 d	7.52 c	1698 b	12780 b
June 24	40 e	5.47 d	1153 c	6350 c
Mean	111	7.99	1714	14146
LSD	19	0.75	264	3312

LSD= Least Significant Difference. Numbers within a column that are followed by the same letter are not significantly different at a probability of >95%.



# Notes from Dairy L

*Tom Syverud  
Extension & Outreach Educator  
Ashland, Douglas, & Iron Counties*

## **What is causing swollen knees on calves?**

This question came from a calf-raiser on a dairy experiment station. The signs included hard, swollen front knee joints on newborn calves. The knee joints were very hard and appeared painful. Even though only about 3 - 4 % of calves got this disorder, it appeared suddenly and limited movement. Calves were raised in individual hutches on gravel. What causes it?

Most who responded to this question identified this disorder as "joint ill." It is caused by improper or incomplete dipping of the navel. In fact, another name is "navel ill." The best prevention is to dip the navel in 7% tincture of iodine immediately after birth, as well as provide for a clean, dry calving area. Joint ill is also known to affect foals. The bacterium which causes it, infects the navel, travels through the blood stream and eventually sets up in the joints.

Unfortunately, after-the-fact treating is not 100% successful. A course of antibiotics is recommended however. It is important to watch for recurring infections. It may also help to treat calves with questionable navels as a preventative measure. One farmer, recommended an old time treatment, of wrapping the swollen knee in large raw cabbage leaves. A compound in the cabbage works to draw the swelling and infection out.

## **Is there a recipe for a "drenching" mixture for sick cows?**

This was asked by an extension agent from New York. What can be used to get the cow's system going again. A couple of "homemade" recipes were offered, most of which included propylene glycol for energy, yeast for vitamins, and electrolyte powder for minerals and a large amount of warm water to dissolve everything.

Sometimes an amino acid solution was also included.

One farmer recommended adding a couple of pounds of rabbit food pellets as well. Mix and let the mixture sit and dissolve for awhile. Many times a cow will drink this mixture, however it can be given with a stomach tube and pump also. Repeat several times a days if the cow is dehydrated; however, the amount of each ingredient is cut back so the cow receives the same amount for the whole day.

# Grazing and feeding considerations for dairy

*Bill Saumer  
Area Agricultural Agent  
Burnett, Sawyer, & Washburn Counties*

There have been hundreds of research projects and hundreds of articles written about the feasibility and profitability of different feeding and grazing options for dairy production. If I wanted to highlight and summarize all of them, I could not put the results here in our quarterly newsletter, but would have to put them in encyclopedia form with several volumes! I just wanted to emphasize a few key points to not overlook before you as a dairyman make major changes in your operation.

Every one of us make thousands of choices each day, and for a dairyman, some of the choices could mean lots of money. This money could either be in accounts payable or accounts receivable, so careful considerations must be made to make as many of the decisions as profitable as possible. This is nothing new, but is often forgotten when people are experiencing problems and they are looking for a "quick fix" to remedy the situation. Always be careful if the results promised sound too good to be true because often times they are!

Just because a grazing program or feeding strategy has worked for someone else, it doesn't mean you will get the same results.

I have worked with many discouraged farmers who were upset that something they tried did not work like it did in a research trial, for another farmer in a magazine, or for a neighbor. Not all breeds are the same and cows are different within a same breed. Responses can vary due to the condition, size, age, temperament, health, comfort, training, crowding, humidity, temperature, moisture, handling, barking dogs, stray voltage, wet feeds, moldy feeds, water supply, and actually hundreds of other variables. I even heard that the kind of music on the radio can affect milk production. They said cows milked more when Country Western



music was played, but they also cried more often and drank more beer!

More seriously, the point I am trying to make is that there are so many factors that can affect the results of milk production and profitability that it is difficult for different dairy producers to expect or achieve similar conclusions.

Many of us have promoted rotational grazing as a way to reduce input costs and therefore increase profits. Many farmers have successfully modified their feeding practices by implementing rotational grazing and they say it was the best move they ever did. Others have not been as successful. The same is true for basically every kind of feed consumed by cattle.

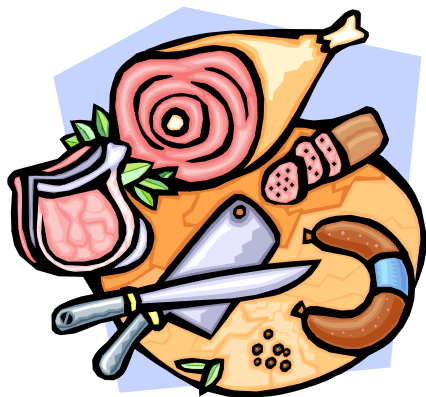
Dairy facilities have a tremendous effect on cows and their production. Ventilation, lighting, overcrowding, bedding and size of stalls, and many other factors can affect cow comfort. Cows will respond differently based on their individual comfort level. Even University research had difficulty repeating results at two different facilities with very similar herds. It was concluded that the reason why cows responded so much better at one facility was because they had

better ventilation and cows were just more comfortable. They also had a little better body condition which again could be related to their comfort level.

People feel better about their jobs when their work environment is good and they actually perform better and are healthier. Cows respond the same way, so it is important that every dairyman do all he/she can to ensure the cows are environmentally and physically comfortable and that all of their needs are being met. If they are in good shape and changes in feeds and management are done gradually, farmers will see a more positive response in any grazing and feeding modifications.

Your cows can not talk, but if they could, what would they say to you? They can express to you their feelings by how they respond to you and how much milk they produce. Keep a careful eye on them as you make changes that you think are for the better. If it is switching to rotational grazing, try to keep as many variables as constant as possible. One challenge with rotational grazing is that as weather conditions vary and plant growth progresses daily, cows are getting a different ration every day. A good rotational grazing program will take this into account and will minimize the forage changes. Many of us like variety in our own diet throughout the week, but cows will produce better if their rations have consistency to them.

If you have any questions regarding some changes you would like to implement on your farm, give me a call. If I do not know all of the answers, I will find someone who does!



## Meat Marketing Workshop to be held

*Kevin Schoessow  
Area Ag Development Agent  
Burnett, Sawyer, & Washburn Counties*

Have you thought about selling meat directly from your farm to consumers? Do you already market meat to friends, neighbors and relatives and want to increase your market share? Or have you thought about ways to add value to your meat products? If you have any interest or desire to increase your profits by direct marketing your farm fresh meat you won't want to miss this workshop.

On Tuesday April 10, 2001 at the Spooner Ag Research Station starting at 9:30 am the workshop begins with a presentation by the Wis. Dept. of Ag on value-added opportunities. The rest of the morning a panel of producers will share their stories on how they direct market meat. How and why did they get into it? What's working? What's not? What's the market potential? How do they find consumers? A local processor will also be on hand to share perspectives direct marketing of meat. The afternoon is devoted to providing farmers with information on regulations, (they're simpler than you might think), doing market research (who are potential customers? What do they want?), promotion (what makes your product special) and pricing (how much meat will you have to sell? How do you price it at a profit? How do you portion it?).

While there is no silver bullet to increasing farm prices, farmers do have options to add value to what they produce, and in turn receive better prices for their products. For those willing to work directly with consumers or perhaps in cooperative arrangements with other producers the opportunity for profitable farming exists.

The cost of the workshop is \$10.00 and includes a catered lunch of locally grown meat. To register call Bill Saumer or Kevin Schoessow at (715) 635-3506 or 1-800-528-1914 by April 6.

## This Quarter's Events

**April 10, 2001** Value Added Meat Marketing Workshop, 9:30 a.m - 3:30 p.m., Spooner Ag Research Station. Preregistration required, see article for details.

**April 7, 2001** Dairy Breakfast and Farm & Garden Show, 8 a.m., Ashland Civic Center.

**April 11, 2001** Fruit Tree Grafting Workshop, 7 p.m., Ashland Ag Research Station.

**April 17, 2001** Apple Pruning & Grafting Workshop, 4:30 p.m., Spooner Ag Research Station

**May 5, 2001** Ag Clean Sweep. Ashland, 10 a.m. - 2 p.m., Contact: Tim Kane, 715-682-7017.

**May 22, 2001** Tomato production educational meeting, Ashland Ag Research Station.

**May 23, 2001** Tomato production educational meeting, Spooner Ag Research Station.

**June 7, 2001** Ag Clean Sweep. Bayfield, 10 a.m. - 11:30 a.m. Cable, 3 p.m. 4:30 p.m. Contact: Jan Victorson, 715-373-6113.

**June 13, 2001** Ag Clean Sweep. Maple, 11:30 a.m. - 1 p.m. Solon Springs, 3 p.m. - 4:30 p.m. Contact: Mary Klun, 715-395-1293.

**June 16, 2001** Ag Clean Sweep. Superior, 10 a.m - 2 p.m. Contact: Mary Klun, 715-395-1293.

**June 18, 19, & 21** Youth Tractor & Machinery Safety Training. 8 a.m. - 4 p.m. Spooner Ag Research Station. \$20/student. Preregistration required. Call 635-3506 or 800-528-1914 for details.

**June 19, 2001** Ag Clean Sweep. Webster, 10 a.m. - Noon. Grantsburg, 3 p.m. - 4:30 p.m. Contact: Rick Schneider, 715-635-2197.

# Winter 2000-01 summary

Mike Bertram  
Asst. Superintendent  
Spooner Ag. Research Station

This winter may go down as one of the coldest and snowiest in recent memory, but just where does it rank among some of those from the past? Temperature and precipitation records at the Spooner Agricultural Research Station go back to 1896, about 104 years, although some records were sketchy at first. Snowfall records go back to 1911, which is 90 years.

After a beautiful October, November started on the wet side. Precipitation of 4.72" ranked as our second wettest November on record. The only wetter November was 5.62" in 1991. A mean daily temperature (average of daily highs and lows) of 31.8°F ranked 63<sup>rd</sup> and 14.0" of snow ranked 12<sup>th</sup>. December was cold and snowy. An average daily temperature of 7.0°F was our 7<sup>th</sup> coldest December. Snowfall amounted to 20.9" (6<sup>th</sup>) from 0.85" of precipitation (49<sup>th</sup>). The coldest December on record was 3.6°F in 1983 and the greatest December snowfall total was 40.0" in 1968.

January brought a needed warm-up and relief from snow. A mean temperature of 18.1°F resulted in one of our warmer Januaries (89<sup>th</sup> coldest of 104). 9.8" of snow fell; ranking 46<sup>th</sup> of 90 and precipitation was 0.65" (50<sup>th</sup> of 104). February saw another cooldown. An average temperature of 11.3°F ranked 30<sup>th</sup> coldest and 1.24" of precipitation (15<sup>th</sup>) brought 17.5" of snow (9<sup>th</sup>). The snowiest February received 25.6" in 1948.

March is not quite over as of writing this. Through the first 25 days, mean daily temperature has been 26.6°F, ranking 50<sup>th</sup>. 7.6" of snow has been recorded, ranking 45<sup>th</sup> and 0.53" of precipitation ranks 92<sup>nd</sup>.

Overall, 69.8" of snow has fallen from November through March, making this the 8<sup>th</sup> snowiest season through these months.

Spooner normally gets an additional 2.6" from April storms, putting a 30-year seasonal average at 52.0". Not including any addition snowfall, this is already the 11<sup>th</sup> snowiest season in 90 years of records. The top three were 93.0" in 1968-69, 90.6" in 1950-51, and 86.9" in 1995-96. The average daily temperature from December through March of 16.8°F ranks as the 32<sup>nd</sup> coldest. The four coldest winters were 9.7°F in 1898, 10.4°F in 1916, and 10.9°F in 1911 and 1964. Precipitation of 8.30" from November to March ranks this as the 6<sup>th</sup> wettest winter. The top three were 9.71" in 1975, 8.74" in 1919, and 8.65" in 1921.

The coldest days this winter were -26°F on December 25, and -20°F on December 12 and February 15 and 21. The highest daily snowfall totals were 6.8" on March 12, 6.0" on February 24, and 4.2" on December 16.

Although no monthly records were set, a few daily records were. A low temperature of -20°F on the morning of December 12 was 1° cooler than the previous daily record set in 1945. Snowfall of 3.8" on February 8 topped the 3.0" recorded in 1927. The 6.0" of snow on February 24 was double the 3.0' received on that day in 1992.

# Internship available at the Spooner Ag Research Station

Mike Bertram  
Asst. Superintendent  
Spooner Ag Research Station

The Spooner Ag Research Station is offering an internship during the summer of 2001. This position will focus on tomato and vegetable production, but will also provide diverse hands-on experience in both agricultural research and production agriculture involving field and forage crops. The internship is open to UW-Madison undergraduate students. Credits for the internship experience can be arranged.

The main responsibilities of the student will include overseeing a participatory tomato-breeding project. New early maturing tomato varieties for use in Northwestern Wisconsin have been developed and screened in recent years and are now being evaluated. In plots to be established at both Spooner and Ashland stations, selections will be planted, maintained, and harvested with characteristic data collected. Complementing the plot management would be the intern's involvement in a participatory process involving campus researchers, Extension educators, and Master Gardener volunteers for varietal selection and development. Besides working with specialists, agents, and station superintendents, the summer intern would assist with horticultural demonstration plots and seasonal horticulture field days.

Other research projects at the Spooner Ag. Research Station focus on identifying improved crop varieties and production techniques for northern farmers and involve campus departments including Agronomy, Soils, Horticulture, Plant Pathology, Entomology, Forest Ecology, and Animal Science. Experience will be gained in crop production management research design and methods. In addition, the intern may assist with equipment/building maintenance and repairs, grounds maintenance, etc.

## We're on the Web!

You may find this newsletter, our gardener's newsletter, and additional information on our upcoming events by visiting the websites of the **Spooner Agricultural Research Station:**

<http://www.uwex.edu/ces/sars/index.htm>

and the **Ashland Agricultural Research Station:**

<http://www.uwex.edu/ces/aars/>



The internship is available from May 29 through August 31, with some flexibility. The work schedule is Monday through Friday, 8:00 a.m. to 4:30 p.m., but occasionally this may change depending on weather conditions or project requirements. For more information contact:

Mike Bertram, Asst. Superintendent  
 UW- Spooner Ag Research Station  
 W6646 Hwy. 70  
 Spooner, WI 54801  
 715/635-3735  
 mbertram@facstaff.wisc.edu

Dr. Robert Tomesh, UW-EX Horticulture Specialist  
 UW-Madison Department of Horticulture  
 1575 Linden Drive  
 Madison, WI 53706  
 608/265-4536  
 rjtomesh@facstaff.wisc.edu

## Are you eligible for BadgerCare?

*John Markus*  
 Area Agricultural Agent  
 Bayfield & Ashland Counties

BadgerCare is Wisconsin's new state program to provide health insurance for uninsured working families. By insuring both children and their parents, BadgerCare makes it easier for parents to create a happy and healthy family life.

### To be eligible:

- You must have children under age 19 living with you.
- Your income must be within the guideline limits.
- There is no limit on assets.
- You must not be covered by health insurance.

If you think you might be eligible, call today and get your eligibility process started.

**CALL: 1-800-362-3002.** (TTY and translation services available), **OR CONTACT:** Your county/tribal, social, or human services department or your local W-2 agency. Find out more at [www.dhfs.state.wi.us](http://www.dhfs.state.wi.us)

## Concerned about high nitrogen/low crop prices?

*Kevin Schoessow*  
 Area Ag Development Agent  
 Burnett, Sawyer, & Washburn Counties

With fertilizer N prices nearly two times the spring 2000 levels many farmers may be rethinking their nitrogen fertilizer programs. As with any fertilizer recommendation there are several factors that must be taken into consideration when determining just how much to apply. Yield goal, soil type, previous crops, and manure applications are key to this determination.

Assuming no other nitrogen sources the recommendation for corn on soils with less than 2% organic matter is 120 lbs/acre of nitrogen for sands or loamy sands and 150 lbs/acre for other soils. As the organic matter content of the soil increases the amount of nitrogen recommended to meet crop needs decreases. On soils with 2-4.9% organic matter the nitrogen recommendation for sands and loamy sands is 110 lbs/acre and is 120 lbs/acre for other soils. Using current corn:N price ratios and research data from long-term nitrogen fertilizers studies researchers calculated the gross return per lb. of applied nitrogen at various rates using a \$2.00/bu corn price. They found that N prices would have to be higher than \$0.37/lb before it would be unprofitable to apply the rate of 120 lbs N/acre. This study also confirms that it is more profitable to apply some N to all potentially responsive acreage, rather than full rates of N to some acreage and no N to other acreage.

Other cost saving strategies are to fully credit N from legumes and manure. Given current corn:N price ratios the increase in gross economic return can be as high as \$30/acre for fully crediting N contributions from legume and manure sources. Recognize cropping situations that need little or no fertilizer N, such as corn following alfalfa and heavily manured fields. Minimize losses of applied N by use of sidedress or delayed N applications on course-textured

soils. Inject or incorporate urea or urea containing solutions within 2-3 days. Where manure is applied consider incorporation or injection of the manure to control ammonia losses. Dairy manure N credits are about 25% greater if manure is incorporated or injected. Finally, consider using diagnostic test such as the preplant and presidedress nitrate test to identify corn N needs.



## Promote daytime calving

*John Markus*  
 Area Agricultural Agent  
 Bayfield & Ashland Counties

Supervision plays an important role in successful calving, particularly for first-calf heifers, says Oklahoma State University Extension Cattle Reproduction Specialist Glenn Selk. But the availability of personnel to observe and assist declines considerably when heifers or cows give birth in the middle of the night.

The easiest and most practical method of inhibiting nighttime calving, he says, is by feeding cows during the night. The specific mechanism for this relationship is unclear, but Dr. Selk sites hormonal effects and increased intraruminal pressure after feeding as possible explanations.

Several research trials have demonstrated the relationship, including one in Iowa in which researchers fed 1,331 cows on 15 farms once daily at dusk. In this study, 85 percent of the calves were born between 6:00 a.m. and 6:00 p.m. Whether cows were started on the night feeding the week before calving started in the herd or two to three weeks earlier made no apparent difference in calving time.

-Drovers

# AGRICULTURAL NEWSLETTER

PRODUCED BY  
THE UNIVERSITY OF WISCONSIN EXTENSION  
AND  
UW-MADISON COLLEGE OF AG AND LIFE SCIENCES

---

## BURNETT • SAWYER • WASHBURN COUNTIES

KEVIN SCHOESSOW, AREA AGRICULTURAL DEVELOPMENT AGENT 635-3506

BILL SAUMER, AREA AGRICULTURAL AGENT 635-3506

YVES BERGER, SPOONER AG RESEARCH STATION SUPERINTENDENT & SHEEP RESEARCHER 635-3735

MIKE BERTRAM, SPOONER AG RESEARCH STATION ASST. SUPERINTENDENT 635-3735

---

PHONE: 1-800-528-1914, 715-635-3506, or 715-635-3735

---

## ASHLAND • BAYFIELD • DOUGLAS • IRON COUNTIES

JOHN MARKUS, AREA AGRICULTURAL AGENT 373-6104

MIKE MLYNAREK, ASHLAND AG RESEARCH STATION SUPERINTENDENT 682-7268

TOM SYVERUD, EXTENSION AND OUTREACH EDUCATOR 682-7268

---

PHONE: 715-682-7268, or 715-373-6104

---

APRIL • MAY • JUNE 2001 VOL. 7, ISSUE 2

*University of Wisconsin, United States Department of Agriculture and Wisconsin Counties Cooperating.  
UW-Extension provides equal opportunity in employment and programming. Including Title IX and ADA requirements.*

*If you have any special needs or require special accommodations, please write to UWEX Area Agricultural Agent, Spooner Ag Research Station,  
W6646 Highway 70, Spooner, WI 54801 or UWEX Area Agricultural Agent, Ashland Ag Research Station, 68760 State Farm Road, Ashland, WI 54806.*



UWEX Area Agricultural Agents  
Burnett, Sawyer, & Washburn Counties  
Spooner Agricultural Research Station  
W6646 Highway 70  
Spooner, WI 54801

BULK MAIL  
US POSTAGE &  
FEES PAID  
USDA  
PERMIT NO. G268