

# Agricultural Newsletter

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



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## Prepare Next Year's Crop Plan Now

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

If you have not completed next year's cropping plan, it should be done right away. We only have a few short weeks left before the ground freezes and we get that white stuff. There are a number of steps or practices that producers have to get done this fall in order for them to achieve the best yields and maximum profitability in 2002 and beyond.

Depending on your soil type and erosion considerations, fall tillage can really aid in next year's weed control program. If you would like to plant a cover crop and also produce some "green manure." There are a number of crops that can be planted, but time is running out on some of them already. If you get your fall tillage done, you can also get into the fields earlier in the spring, disrupt weed and insect establishment and get the new crop planted sooner thereby increasing yields and profits.

Soil testing is another often overlooked fall practice. Get your soil samples pulled so that you do not have to guess at what the pH is and what the fertilizer requirements might be. If lime is needed, it can still be applied this fall as well as some fertilizers. Even if you do not apply the fertilizers this fall, you will know what your fields need and you can pre-pay for them this fall. This may be an important consideration for some of the dairy farmers that received good milk prices this past summer and money will more than likely be more tight next spring. Most fertilizer suppliers do offer a really good price for pre-paid fertilizers as do seed companies, so take advantage of the early discounts if you can.

If you fall apply livestock manure, be sure to get the most bang for your buck and work it into the soil as soon as you can so it will still be there next year for your new crop.

Most of you reading this already have known these tips for many years, and my kids also know they are supposed to keep their room clean, but I have to constantly remind them or it doesn't get done! Stop by any one of our offices and get soil sample bags or call up your crop consultant and get him/her to pull your soil samples. Get that fall tillage done, lime spread, fertilizer and seeds paid for, and fix up your spring tillage and planting equipment in your shop this fall and winter. If you get this all done, you will thank me next spring for you will have a much more pleasant and productive planting season as well as increase your yield and profit potential.

## Tractor headlights and flashers prevent collisions in daytime hours

*John Markus  
Area Agricultural Agent  
Bayfield & Ashland Counties*

Personal observation indicates that few tractor operators use their headlights and amber flashers as they travel on public roads during daytime hours. Operators need to remember two things: most roadway collisions involving farm machines occur during the day; and part of the responsibility of the operator of a slow-moving vehicle is to make the vehicle as visible as possible to other motorists.

Use of headlights and flashers at all times during roadway travel is an important part of visibility. Of course, SMV emblems and other markings are important, but lights and flashers help a tractor or other machine stand out against a background of fields, trees, or anything else, and give the motorist extra time to make a safe approach. Extremity lighting or marking has the same intent – to make the outer edges of a machine more visible.

Additionally, if a collision occurs, tractor operators have an additional defense by showing that they used their lights and flashers. Not using them, when they were available with the flip of a switch, can raise questions about who was to blame, especially in litigation. Using lights and flashers to make equipment as visible as possible removes the excuse that the equipment could not be seen soon enough to avoid a collision. Day or night, a smart operator wants to show he or she made every reasonable effort to be visible and is committed to roadway safety.

**Source: Mark Purschwitz**  
*Wisconsin Farm Safety and Health Specialist*

## Dairy marketing is more important now than ever

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

If you have read this newsletter in the past, you know we have stressed marketing opportunities and options, especially in the relatively new area of milk marketing. Fortunately, dairy farmers enjoyed good milk prices during most of 2001, but don't forget what happened in 2000! (For those who may have forgotten, we set an all-time low milk price in 2000.) Our milk prices have been on a roller-coaster ride for many years and there is no reason to not plan for them to continue in the future.

You may have heard stories about some farmers who used one marketing option of contracting their milk for a specific price. The price the farmer agrees to for a certain volume of milk is one that is profitable for them. Some farmers did go with this option for some of their milk and were happy with knowing they were going to remain profitable during the contract period. The only drawback to contracts is if for some reason the price goes up and remains high during the contract period. There are some ways to buy your way out of a contract and depending on what the prices and costs are, this option is a good thing. Farmers with this type of contract have found themselves in this situation in 2001 due to the Class III prices this past summer.

Remember, there are several marketing options from which to choose and it is important to work with the right one that maximizes your profit and you feel the best about. If a major concern of yours is to try to establish low price protection and still be able to receive the high Class III price if it were to go up, then a put option would be a good choice. This has been the emphasis the USDA sponsored Dairy Options Pilot Program (DOPP). This program informs farmers how to use a put option which sets a floor price, but at the same time leaves

the top open if the price is above the floor price. It basically is an insurance policy to protect a dairy producer from a loss due to lower milk prices and if the prices are above the set price, the farmer does not use the option and the only cost is the pre-determined premium, just like any other insurance policy.

The DOPP has only been available in certain states including Wisconsin, but unfortunately only the counties to the south of us have been invited to participate so far. The incentive provided was that the government would pay for the majority of the participating farmers' program costs. It is not wise to wait for a government sponsored program if a dairy farmer is currently in need of future price protection. You can get the same kind of program and protection on your own without this program, but you have to pay for it yourself, but it could be the best insurance you ever had.

So, if you have heard about farmers who had contracted prices and could actually have gotten more for their milk if they had no contract at all, don't shut the door on marketing. There are several different options and the only trick is to determine which one is best for you. If you have any questions about milk marketing options, call me and I will see what we can do.

## Interested in crop insurance?

*John Markus  
Area Agricultural Agent  
Bayfield & Ashland Counties*

Crop Insurance Today, a publication by National Crop Insurance Services, is available free from most Extension offices, FSA offices, and agricultural lenders. This publication was developed to help broaden farmers' knowledge of how crop insurance fits into their risk management plans. This edition contains outstanding articles on production, marketing, and financial risks; the principles of insurance; characteristics to look for in selecting an insurance agent; crop insurance availability and features of popular products; and, risk management education.

## New project aims at identifying poorly understood diseases

*Mike Mlynarek  
Superintendent  
Ashland Ag Research Station*

Over the years, plant breeders have been able to selectively breed crop varieties that are resistant to specific diseases and insect pests. Identifying the disease causing organisms or insects, understanding their life cycles, and characterizing the symptoms they cause, are important aspects of breeding resistant crops or developing production management strategies for disease and insect control.

Here's an example. Not too many years ago, alfalfa often didn't yield or persist well on poorly drained, fine textured soils. Plants were short and pale, with poor vigor and few stems per crown, while roots and crowns had considerable dead and decaying tissue. Plant pathologists were able to isolate two fungi, *Phytophthora* and *Aphanomyces*, that cause alfalfa root and crown decay on many wet sites. By inoculating healthy alfalfa with these fungi, characteristic symptoms would often develop. When genetically diverse alfalfa populations were subjected to the fungi, a range of infection severity was observed. By selecting and working with the relatively few plants which tolerated the fungi, plant breeders were able to incorporate *Phytophthora* and *Aphanomyces* resistance into the improved alfalfa varieties available on the market today. Much of this work has been done by U.W. Madison scientists and involves various U.W. Ag Research Stations. The Ashland Station continues to be a site where Dr. Craig Grau selects advanced alfalfa lines with even better disease resistance and tolerance to saturated soil conditions.

A new effort hopes to focus on overcoming diseases that may be limiting the productivity and persistence of common crops. Preliminary information indicates that vi-

ruses could be playing a much larger role than was previously suspected. Certain viruses appear to have a wide host range, which means they are able to infect several crop species as well as weeds, and they are easily spread as insects feed on these plants.

Next summer, the Ashland Station plans to be part of a project that will survey alfalfa, clover, trefoil, and possibly other crops in an effort to identify diseases which are limiting their productivity and persistence. I anticipate hiring an intern who will spend considerable time collecting samples across the northern counties. Samples will be tested to see if various disease causing organisms are present.

I'll keep you posted as details develop. It will be important to involve farmers who'll allow us to regularly sample their fields, especially fields with plants that seem "unhealthy." I look forward to this cooperative project with northern producers.

## Mark your calendars now for February 1-2, 2002 conference

*Kevin Schoessow  
Area Agricultural Agent  
Burnett, Sawyer, & Washburn Counties*

I realize this conference is months away, However, I wanted to remind those producers interested in value added agriculture that the Fourth Annual Value Added Conference: Bringing Profit Back to the Farm, will be held Feb 1-2, 2002 at the Ramada Inn and Conference Center in Eau Claire. This is an excellent chance to learn more about ways to direct market ag products to wholesale and retail consumers, meet with other producers involved in value added agriculture, and visit with industry and agency folks at the trade show. As in the past, meals and breaks will feature local Wisconsin and Minnesota produced food.

For more information on the Value Added Conference or on value added agriculture, contact Kevin Schoessow, at the Spooner Area Ag Agents Office at (715) 635-3506 or 1-800-528-1914.

## Farm couples weekend getaway scheduled

*Kevin Schoessow  
Area Agricultural Agent  
Burnett, Sawyer, & Washburn Counties*

The Wisconsin Farm Center is again offering a free weekend getaway for farm couples through their *Sowing the Seeds of Hope* Project. These weekend getaways are designed to give farm couples a much needed and well deserved respite from the stress and strain of farming. The weekend experience is designed to help farm couples deal more effectively with stress and improve communication with each other as well as children.

There are eight weekend getaways planned at various locations across the state:

**October 20-21, 2001**-Holiday Acres Resort, Rhinelander; **December 1-2, 2001**-Inn on Maritime Bay, Manitowoc; **January 5-6, 2002**-Cedar Valley Center, West Bend; **February 9-10, 2002**-Best Western Motel, Marinette; **February 9-10, 2002**-Cedar Valley Center, West Bend; **February 9-10, 2002**-Park Inn, Eau Claire; **February 16-17, 2002**-Best Western Quiet House, Dodgeville; **March 2-3, 2002**-Radisson Hotel, La Crosse.

There is **no** cost to attend the seminar—the cost of refreshments, meals, lodging, instruction and materials are being covered by grant funds. And, if you need financial assistance with child care or farm labor during the time you are away from the farm, they may be able to help cover these costs too.

**Act now!** Each seminar will be open to the first eight couples that sign up to attend and a confirming letter will be sent to each couple. If you have questions about the seminar, please call Roger Williams at (608) 263-4432 Fax: (608) 265-2329 or Email: [rwilliams@dcs.wisc.edu](mailto:rwilliams@dcs.wisc.edu).

## How dense are you?

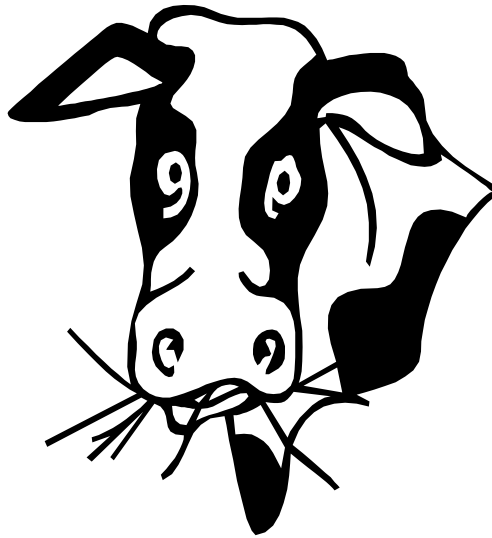
*Bill Saumer  
Area Agricultural Agent  
Burnett, Sawyer, & Washburn Counties*

No, this is not an article on your intelligence or lack thereof. I am attempting to use a ploy that newspaper folks do in order to get your attention and now that I do, I want to talk about the importance of bunker silo densities. If you do not harvest or feed any type of silage and want to learn about your IQ, you can stop reading now and look elsewhere for your information.

Density is important because it determines the porosity of the silage along with dry matter content. Porosity controls the rate at which air moves through the feed and subsequently the amount of spoilage that occurs during storage and feeding. University of Wisconsin and other research shows that the higher the density (more pounds per square foot) means that there will be less spoilage and dry matter loss. There can be increased dry matter losses with lower densities without spoilage. So just because you may not have much spoilage, that doesn't mean you have optimum silage densities. In upright silos this is less of an issue because of the weight of the material on top helps increase the density of the silage underneath it. However, in a bunker silo we do not have the weight and gravity working for us, and anything a farmer can do to increase the density is a real plus.

Another importance of bunker silo densities is that the capacity of the silo is increased with higher densities. This also leads to reduced losses during storage. So, what we want to do is to decrease the porosity of the material and increase the density. There are some simple things a producer can do to help achieve this situation.

One of the most critical factors affecting density and a quality feed is the harvesting moisture. This can be a challenge if weather conditions do not allow for harvesting to take place when it should be



done. Breakdowns are another problem and that is why I have often stressed the importance of maintenance. A family I know spent the better part of their Sunday afternoon stuck in the middle of North Dakota this past summer because their fan belt broke on their van. I have never had a fan belt break on me, but that is due to the fact that I replace them along with any other worn parts before they break. Not enough can be said about inspections and a sound maintenance program for any equipment, especially farm machinery. Breakdowns with farm equipment can not only be costly, ill-timed and delay the harvest, they can create or lead to accidents and injuries or even death. So, fix it before it breaks.

Sorry I got off of the main topic of silage densities, but all of these things are related. Now that you are harvesting on time with good equipment, you want to fill your pile as quickly as you can as well as to make sure it is properly packed. Heavy tractors without duals have been thought to do the best job, but research has shown that other factors can affect density more than if duals are used or not. The reason for not using duals was to have more weight applied per square foot as packing takes place, but overall weight of the tractor comes into play and as the weight increases, the negative effects of duals decreases. Sometimes the sides of piles do not get packed as well and soft spots can be created causing a tractor

roll-over. Be sure to pack with a safe tractor and use the ROPS and seat belt. Many silage piles have been ruined by muddy conditions and mud sticking to the tires and falling off when driven over the pile. Make sure the tires are kept clean.

Other methods for increasing the packing factor and thereby increasing the dry matter density are;

- Reduce delivery rate of silage to the bunker thus increasing packing time per ton.
- Harvest at near ideal moisture levels (60-70% moisture or 30-40% dry matter).
- Increase the depth of silage in the bunker silo based on herd size and the amount of feed to be fed per day.
- Increase the weight of the tractor by adding weights or using a heavier tractor.
- Add more packing tractors.
- Reduce packing layer thicknesses.
- Increase packing time.

Some of these tips are easier to do than others, but do what you can. Most of you will have your harvesting completed by the time you read this, but you can use this information next time you fill your bunker. You can also use this information to determine which factors affected your density scores.

Now to the important question, how can you determine what the density of your pile is? Well, I am glad you asked because we have the tool right here to determine your bunker silage density. It basically is a large sample probe that has a known volume and you simply weigh the material in the tube to obtain the silage density. If your scores are great, then you did a fine job filling your bunker. If you want to improve your scores, you can use the information in this article or call us for more information. If you would like to utilize this fine piece of equipment and calculate you density, just give us a call! The Spooner numbers are, 715-635-3506 or 1-800-528-1914.

## Fall fertilization of forages

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

Fall is one of the best times to fertilize hay fields and pastures. If adequate soil fertility was maintained during the growing season, a single fall maintenance application is all that is needed. Soils are dryer now, hay-making is done and most importantly, forages can utilize the nutrients added to improve the over-wintering ability. This is particularly important for legumes. The main nutrients needed by forages are potassium, phosphorus and sulfur. Forage management affects fertility needs, less is needed with a 2-cut system compared to a 3-cut system. Soil fertility affects the time it takes a forage to regrowth after harvest, which in turn affects the total season yield. A general rule of thumb for forage fertilization is 100 # of an 0-10-40 or 0-14-42 per acre per ton of forage removed during the growing season. Soil testing is the only accurate and economical way to be sure of forage fertility needs.

Potassium (K) is of major importance for legumes. Potassium is used within the plant for carbohydrate metabolism and translocac-

tion of starch, and protein synthesis. Fertilizer additions will increase root development and yield, forage quality, stand longevity and disease resistance. This nutrient is absorbed in large amounts compared to others. Fortunately, K is also present in large amounts in Wisconsin soils. This element naturally comes from soil minerals like potassium feldspar, the pink crystal in granite, and secondarily from clay minerals in soils. Unfortunately, more than 90% of the K is held tightly in soils, in a fixed or slowly unavailable form. Over time, this K is released to the soil solution, from which plant nutrient uptake occurs. Potassium is mobile within the plant, this means that when a deficiency occurs, the plant takes potassium from old plant parts and moves it to new growth. As a result, nutrient deficiencies occur on lower leaves first. Deficiency symptoms are white spots on the leaf margins of older leaves.

The activity of phosphorus (P) in soils is very complicated. Soil P occurs in combination with other elements that are not soluble in water and not available for plant use. The maximum availability of P is at a soil pH of 5.5 to 7.0. Liming a field greatly increases the level of P availability to the plant. As a result, the forage response to P and or lime can be great. Phosphorus is used by the plant for early maturity and reproduction, root growth, and energy transfer within the plant. It also is mobile within plant. Deficiency symptoms in legumes are a dark green--almost blueish--color, and reduced yield. It is best to correct low soil P levels before seeding, and then to maintain adequate levels with annual additions.

Sulfur (S) is used by the plant in protein and oil formation. Sulfur occurs in soils, mostly in the form of organic matter. Manure is a great source of S. Another source of S is rainfall. Sulfur deficiency causes reduced growth, pale color, and low protein content. The soils most likely to be sulfur deficient are sandy, leached, and/or low organic matter soils. Many times, a forage field may not exhibit deficiency symptoms, but still yield and disease resistance will suffer.

## This Quarter's Events

**October 21, 2001**, Farm Couples Getaway, Holiday Acres Resort, Rhinelander.

**November 1-3, 2001**, Grape Pruning Workshop, Spooner Ag Research Station.

**November 1-3, 2001**, Great Lakes Dairy Sheep Symposium, Eau Claire, WI. Call 715-635-3735 for more information.

**November 6, 2001**, Pest Management Update, Tilden. Call 715-726-7950 to register.

**November 13-14, 2001**, Midwest Dairy Herd Health Seminar, Ramada Inn, Eau Claire. For information call 715-537-6250.

**February 1-2, 2002**, Value Added Conference, Ramada Inn, Eau Claire.

**February 9-10, 2002**, Farm Couples Getaway, Park Inn, Eau Claire.

The University of Wisconsin Extension provides equal opportunities in employment and programming. Requests for reasonable accommodations for disabilities should be made prior to the date of the program or activity for which it is needed. Please make such requests as early as possible by contacting the appropriate office so that proper arrangements can be made.

## 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/>

# Hybrid poplar tree update

*Kevin Schoessow  
Area Agricultural Agent  
Burnett, Sawyer, & Washburn Counties*

In May of 1999, the Ashland and Spooner Ag Research Stations planted five acres each of hybrid poplars. The purpose of these plantings was to demonstrate the cultural practices required to grow these trees as an alternative agriculture fiber crop.

The fields were tilled and prepared as if corn was to be planted, the field was marked for planting, and a preemergence herbicide was applied. Eight-inch long hybrid poplar planting twigs were then placed into the soil leaving about 1/2 inch of the twig above ground. The twigs were planted on the marked grid spacing of 10 ft by 10ft. Throughout the first and into the second growing season the trees were disc cultivated within and between the rows to remove any competition from weeds. So how have the trees grown? Much better than we had anticipated! After the first growing season at Spooner, the eight inch long planting twigs had grown into trees

with an average height of 74 inches and a Diameter at Breast Height (DBH) of 0.3 inches. After the second growing season the average tree height was 16.6 feet with DBH of 1.8 inches. As of mid July 2001, only 26 months after they were planted, average tree height of 22 feet and average DBH of nearly 4 inches are being recorded at Spooner. The hybrid poplars at Ashland had similar growth rates, although their overall height and DBH is slightly less than Spooner.

With these remarkable growth rates we are expecting the trees to be ready for market as whole tree chip in only seven more years. Beginning next spring, a portion of the Spooner plantation will be pruned to remove lower branches in an attempt to promote tree growth more suitable for saw timber.

For more information on the Hybrid Poplar Project contact Kevin Schoessow at the UW-Extension Area Ag Agents Office at the UW Spooner Ag Research Station at 1-800-528-1914 or (715) 635-3506, or Mike Mylnarek at the Ashland Ag Research Station at (715) 682-7268. More information is also available at the following URL: <http://www.plantpath.wisc.edu/poplar>.



**5 months after planting  
Average tree height: 6 ft.**



**2 years, 2 months after planting  
Average tree height: 21 ft.**

# Does it pay to cover bunker silos and piles?

*Kevin Schoessow  
Area Agricultural Agent  
Burnett, Sawyer, & Washburn Counties*

According to research done at Kansas State it does pay to cover bunker. Sixty five percent of the organic matter in the top 4 feet is lost if the feed is not covered, and only 12 percent of the organic matter in the top 4 feet is lost if the bunker is covered.

Let's assume the top 4 feet in a 30 ft. wide by 100ft. long by 8ft high bunker holds 210 tons of as-fed haylage. An uncovered bunker silo with these dimensions would result in organic matter losses that would total 136 tons of as-fed forage. If the bunker were covered and weighted down with tires the losses would total 25 tons of as-fed forage. The difference between covering and not covering, based on Kansas State research, is equivalent to 111 tons of as-fed haylage. Based on \$35.00 per ton as-fed, the total difference between covering and not covering the bunker equals \$3,885 of forage.

# Bunker silo covers

*Kevin Schoessow  
Area Agricultural Agent  
Burnett, Sawyer, & Washburn Counties*

Silage is covered for two reasons. First, covered silage reduces exposure to oxygen. Oxygen is required for the growth of aerobic organisms. These aerobic organisms cause the decomposition of valuable feed. A second reason for covering silage is to exclude rainfall. Precipitation washes organic acids and other soluble feed components from the forage. Organic acids keep silage pH low resulting in an environment that prevents growth of silage-decomposing organisms. In addition, precipitation introduces oxygen to the feed. Seepage caused by either high-moisture forage or precipitation carries away valuable feed nutrients and

increases the risk of surface and ground-water contamination. Bunker silo covers should be selected based on their ability to exclude both air and precipitation.

Research and on-farm experience has shown 4-6 mil thick plastic containing ultraviolet light protection works well to exclude air and precipitation. Precipitation runoff from the bunker silo cover should be diverted without passing through the silage (often a problem at the bunker walls). Plastic should be held in contact with the silage to keep air from moving under the plastic to get into the forage. This is often done with waste tires or tire sidewalls. The tires should touch each other to obtain good, uniform weighting. Soil or sandbags are often used to seal the plastic edges.

A variety of materials has been used on farms as an alternative to plastic covers. Some of these materials have been researched to study their effectiveness at preventing silage from spoiling. Producers often judge effectiveness by the depth of the spoilage layer (blackened forage) and the convenience of using an alternative cover. Extreme caution should be used when considering producer's claims of alternative cover performance. Most producers don't understand that one inch of black forage may have been 2-3 inches of green, high quality feed when placed into storage. This represents a 50-65% loss of dry matter. They also don't understand that there is a transition zone (1-2 feet) of brown-gray forage below the black layer where a substantial amount (20-30%) of dry matter loss occurs.

Research has shown that covering silage with ground limestone or soil may provide some silage protection compared to no cover at all. However, unless a cover excludes air and water, it does not compare very well to plastic covers.

Research has also shown that covering silage with molasses, "nutri-shield", sawdust, sod, or a roof only does not protect against spoilage loss any better than if the silage remains uncovered.

## The 2001 growing season

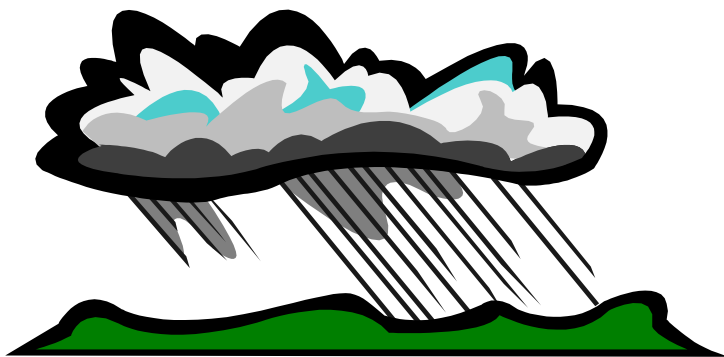
*Mike Bertram  
Asst. Superintendent  
Spooner Ag Research  
Station*

The 2001 growing season came to an end at the Spooner Ag. Research Station and much of northwestern Wisconsin on the mornings of September 24 and 25. Temperatures dipped below 32° F for several hours and reached a low of 30° F on September 24 and 29° F on September 25. Lows up to this point were generally in the 40s to 50s.

A total of 2462 heat units (base 50) were recorded in Spooner for the season. This is higher than 2317 in 2000 and lower than 2563 recorded in 1999 and 2820 in 1998. Totals from previous years include: 2267 in 1997, 2208 in 1996, 2338 in 1995, and 2377 in 1994. The killing frost for last few years have been noted on September 24, 2000; October 3, 1999; October 1, 1998; October 10, 1997; October 3, 1996; and September 20, 1995. The average killing frost date recorded in Spooner from 1970-2000 is September 28, so this year was a few days early.

The high temperature recorded in Spooner was 95° F on August 7. Temperatures of 90° F were reached on 11 days this summer. This is the same total as in 1999. The highest temperature reached in 2000 was only 88° F. Temperatures of 80° F or higher were recorded on 61 days in 2000. This compares with 50 days in 2000 and 60 in 1999. The highest temperature in 1999 was 96° F.

Rainfall was in excess for the first half of the growing season, which prevented fieldwork and delayed planting. Only 8.44 inches of precipitation was recorded in Spooner from November 1, 2000 to March 31, 2001, much of which was in snowfall. The melting snow combined with 8.39



inches of rain in April flooded many rivers and fields. The rain in April set a new record by almost 2.75 inches. The rain didn't stop though as 3.66 inches fell in May and 7.33 inches in June. This delayed or ruined first crop alfalfa harvest for many farmers.

July started dry. Eighteen consecutive days without rain were recorded in Spooner. This combined with temperatures in the high 80s and 90s baked crops. Normal rainfall returned later in the month and 3.57 inches was recorded; however, some areas had less. August rainfall amounted to 4.48 inches and 2.05 inches fell in September. Precipitation from April through September totals 29.48 inches, which is the sixth highest total on record for these months. The highest was in 1991 at 32.89 inches. Average rainfall is 21.02 inches.

Small grains did well this summer. Oats plots averaged 94 bu/acre. Top varieties and yields were Jim (104), Ogle (101), Dane, Richard, Moraine (99), Belle (98), Gem (94), and Vista (92). Barley plots averaged 66 bu/acre with Chilton at 77 and Kewaunee at 71. Soybean plots looked good. Those in maturity group 1.2 and lower were physiologically mature before the killing frost occurred. Corn at the station ranged from black layer to 50% milk line when it froze.

This growing season will be remembered as having just about everything happen that could: heavy rains, frequent hail, high humidity, high temperatures, long dry spells, and even a tornado.

# AGRICULTURAL NEWSLETTER

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

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## BURNETT • SAWYER • WASHBURN COUNTIES

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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.*



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