

# Agricultural Newsletter

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



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## Warm Weather and Alfalfa

Dennis Cosgrove  
UW-River Falls Forage Specialist

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Recent temperatures in the 70s have many concerned about the effect of these temperatures on alfalfa. Much of our alfalfa has broken dormancy and is showing varying levels of new growth. The extent to which this damages the plants depends on the weather as we head into spring. If we are lucky and get no "killing frost" type temperatures we should be OK and have a very early first crop. If, on the other hand, we get very cold temperatures, we may have some problems.

1. **Delayed Green-up** - The crown buds which give rise to this early growth were actually formed last fall. If they begin growth and are then killed, the plant will have to make new buds which will delay the actual green-up to some extent.
2. **Low carbohydrate reserves** - Some of the carbohydrates which would normally fuel early spring growth will have been used up giving rise to the growth that was killed. This, likewise, may delay green-up.
3. **Heaving** - We experienced warm enough temperatures to thaw the soils around the plants. Now we are experiencing our typical March freeze/thaw cycle. This makes plants vulnerable to heaving.
4. **Tissue or plant death** - The worst case is that plants may completely de-harden and will be killed by very cold temperatures.

### What to do?

**Delayed Green-up:** Wait! Don't decide to tear up a stand until you have given it adequate time to replace damaged crown buds and re-grow. Dig up a few plants and feel them. If they are soft and watery they are probably dead. If they are nice and white and firm they are probably OK and just need some time

**Low carbohydrate reserves:** Again, wait a while to evaluate re-growth. At some point in the season the stand should be allowed to grow to 10-25% bloom in order to replenish low reserves. Ideally, this would occur in third cutting as the quality reduction associated with delayed harvest is much less at that time. If a fall cutting was taken, the stand is an old one, or for some other reason the stand seem severely weakened. First cutting may be a better alternative. Just keep in mind that quality will be low.

**Heaving:** There is not much to do about this but there are some things we know about heaved alfalfa. Heaving disrupts the root system and make the plant more likely to suffer from dry weather. Plants that are heaved less than an inch may well re-seat themselves and survive. Plants that are heaved more than an inch may well survive this year and make a crop. They will likely die over winter. Obviously, cutting height would need to be increased in these stands.

(continued)

**Tissue or Plant Death:** Evaluate the roots as described above. If the plant is mushy, watery, and is a greyish color when split, it is dead. Due to the amount of regrowth on many of our stands from our abundant hay crop last year, most of our alfalfa went into winter with high root reserves. Our dry soils actually tend to decrease winter injury also, so I am hopeful that we won't see a lot of this, but only time will tell.

*My plants are not growing and my neighbors are. Are my plants dead?* Remember that alfalfa varieties have differing levels of fall dormancy. The less growth a variety exhibits in fall the more dormant it is. Dormancy class go from 1 to 9 with the lower number being the most dormant. Around here we grow mostly 2-4. The more dormant a variety is the slower it greens-up in spring. A dormancy class 4 variety may well be growing while a 2 may not.

## Machinery cost and custom rates

*Russell Kiecker  
Area Agricultural Agent  
Burnett, Washburn, & Sawyer Counties*

The spring field work is fast approaching, and along with that comes many questions about the cost of operating machinery and charges for custom work.

Recently, the University of Minnesota released two documents that can provide you with guidelines in assessing and estimating these types of questions.

The first document is called, "Minnesota farm Machinery economic costs estimator for early 2000." The second document is called, "Minnesota custom rate survey."

If you have internet capability, you can get to this information by going to the following URL: <http://apecon.agri.umn.edu/crop.html>.

You may also contact the Area Ag Agents office at the Spooner Ag Research Station (635-3506 or 1-800-528-1914) to request copies of these documents.

## Notes from Dairy-L

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

### Feed Price Resources on the Internet:

<http://www.ansi.okstate.edu/EXTEN/feedbull/> (Updated weekly with southern emphasis)

[gopher://shelley.ca.uky.edu:70/11/agmkt/market\\_wire](http://gopher://shelley.ca.uky.edu:70/11/agmkt/market_wire) (USDA Market Wire Reports includes dairy)

<http://www.morgan-research.com/forages/hay/pricewkly/index.html> (Includes regional hay reports)

<http://www.ansi.okstate.edu/library/dairy/> (Provides links to sites in the www Virtual Library for Dairy Production)

### Acidosis

A farmer has been having a high level of acidosis the last few years. The fiber levels in the diet are good, and effective fiber (the length of corn) is good. He then suspected the silage inoculum of lowering the silage pH too much. The situation is worse when feeding HMC.

Others had similar experiences when feeding HMC that was wet or too fine. If possible, add dry hay to the mixer or not grind as long. Most agreed that with silage in the pH 4.0 to 4.5 range, preservation was good and the silage inoculant is working and he should keep using it.

Even though things look good on paper, check these other areas:

- Are the cows sorting feed?
- Are you slug feeding?
- Do you ever feed to an empty bunk?

### Reseeding Pastures for Rotational Grazing

Given the cost and time to reseed, these recommendations were given. First, the soil fertility should be checked and corrected. A stand can be improved and maintained better with adequate soil fertility. Second, a quick response can be obtained from dividing pastures according to natural breaks and herd size. Third, frost seeding can improve stand density. Just as the snow is leaving, during the freeze/thaw period, spread clovers and grasses at a rate of 2 to 4#/A. Red clover is most common and ryegrass is being used more. Frost seeding should be an annual practice and grazing should be used to reduce weed and other competition. Intensive grazing management will thicken stands over time.

### Attention: Agricultural Producers Sales tax exemption form deadline is April 21, 2000

As part of the 1999-2000 Wisconsin State Budget, the Legislature recently enacted a year-round exemption from the sales tax of electricity used in Agriculture. Your farm or business may be eligible for this exemption.

Currently, all farm and residential electric customers pay no sales tax on electricity during the period of November 1- April 30. This moratorium would remain under the new law. What would change is that eligible farms and agricultural business could claim an exemption for the ag use portion only of their electric power bill during the months of May-October. Agricultural producers must estimate the percentage of their power bill used for agriculture.

Complete the Wisconsin Sales Tax Exemption Certificate (S-211), which is available through the Wisconsin Dept. of Revenue (608-266-2766) or by calling the UWEX Area Ag Agents Office at 800-528-1914. Certificates need to be completed and mailed to your electric company's office by April 21, 2000 to be effective May 1.

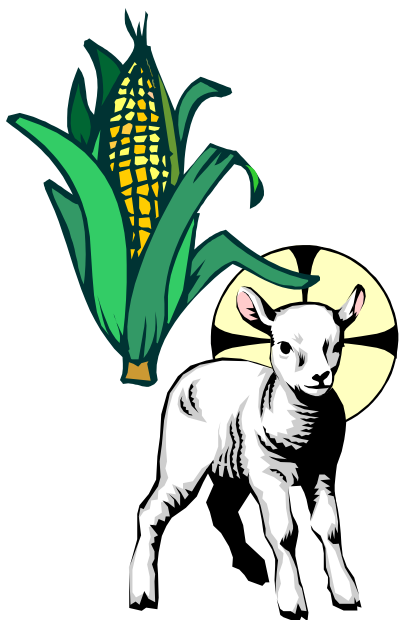
## New management at the Spooner Ag Research Station

Lorraine Toman  
Program Assistant  
Spooner Agricultural Research Station

Since the recent retirement of Superintendent Robert Rand, some changes have taken place at the Station. Former Assistant Superintendent Yves Berger has assumed the position of Superintendent, and Mike Bertram, recent graduate of UW-Madison, has accepted the position of Assistant Superintendent.

Mr. Berger had been the Asst. Superintendent of the Station since 1988. He has conducted the sheep research, including pioneering work in the US dairy sheep industry, during that time. Mr. Berger will continue as the Station's sheep researcher in addition to his new duties as Superintendent.

Mr. Bertram, originally from the Fond du Lac area, has recently earned his Masters of Science degree in Agronomy from UW-Madison, and has previously worked on campus as a research assistant in the Department of Agronomy. He will conduct the crops research at the station as well as serving as Asst. Superintendent.



## Internship available at the Ashland Ag Research Station

Mike Mlynarek  
Superintendent  
Ashland Ag Research Station

The Ashland Ag Research Station is offering an internship during the summer of 2000. This position will provide diverse hands-on experience in both agricultural research and production ag involving canola and other oilseed crops, forage grasses, forage legumes, corn, soybeans, small grains, and alternative crops. The internship is open to UW-Madison undergraduate and short course students. Credits for the internship experience can be arranged.

The main responsibilities will include overseeing canola research plots and production acres. Canola seed is processed into edible oil and specialty oil products. Although canola has a large international market and for many years has been grown widely in parts of Canada, US production is just beginning to expand. Dr. Tom Osborn, UW-Madison Agronomy, is developing canola varieties specifically adapted to upper mid-west conditions. The intern will assist with canola plot maintenance, data collection and note taking, harvesting, data compilation, etc. The intern will also assist with "test cropping" canola production on fields both on and off the Ashland Station. Other oilseed species may be evaluated in test plots.

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

The Ashland Station is located near Lake Superior, four miles west of Ashland, WI, in an area with abundant outdoor recre-

ational opportunities. The internship is available from May 22 through August 25, 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. Pay will be roughly \$6.00/hr. Dorm space with kitchen facilities is available at the Station for \$3/day. For more information contact:

Mike Mlynarek, Superintendent  
UW-Ashland Ag Research Station  
68760 State Farm Rd.  
Ashland, WI 54806  
715/682-8575  
[mlynarek@facstaff.wisc.edu](mailto:mlynarek@facstaff.wisc.edu)

Dr. Tom Osborn  
Rm. 345 Moore Hall  
1575 Linden Drive  
Madison, WI 53706  
608/262-2330  
[tcosborn@facstaff.wisc.edu](mailto:tcosborn@facstaff.wisc.edu)

### 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** (newly redesigned and updated!):

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

and the **Ashland Agricultural Research Station**:

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

# Wisconsin's Runoff Management Rules at a Glance

The Wisconsin Department of Natural Resources (DNR) is proposing administrative rules to control polluted runoff (nonpoint source pollution) in both urban and agricultural areas. The four new rules and three revised rules are the result of several years of proposed changes to the State's nonpoint source programs that culminated in the 1997 and 1999 state budget bills. The most

significant change is the introduction of statewide performance standards and prohibitions intended to enable the State to meet water quality standards. Other changes give local governments more power to control nonpoint source pollution, provide frameworks for new grant programs, and establish stronger links between agencies and programs that address polluted runoff in its many forms.

## Proposed Rules and Rule Changes

### NR 120 Priority Watershed and Priority Lake Program

Revisions primarily cover *agricultural* nonpoint source grant activities *in current priority watershed projects*.

### NR 151 Runoff Management

This proposed new rule has four subchapters

**I Agricultural Performance Standards and Prohibitions**--covers erosion from croplands and pollutants from animal feeding operations, including manure management prohibitions.

**II Non-Agricultural Performance Standards**--covers performance standards for construction sites, post-construction development, and developed urban areas.

**III Transportation Facility Performance Standards**--describes criteria, applicability, and enforcement for transportation facilities.

**IV Technical Standards Process for Non-Agriculture**--describes the process to be used for developing non-agricultural technical standards.

### NR 152 Model Ordinances for Construction Site Erosion Control and Storm Water Management

This proposed rule includes model ordinances for construction site erosion control and storm water management.

### NR 153 Runoff Management Grant Program

This proposed rule addresses funding of urban portions of priority watershed and lake projects and two newer grant programs.

### NR 154 Best Management Practices, Technical Standards, and Cost-Share Conditions

This proposed rule lists acceptable best management practices, technical standards, and cost-share conditions for the projects outlined in NR 120, NR 153, and NR 243.

### NR 216 Storm Water Discharge Permits

This rule revision requires the non-agricultural performance standards be included in storm water permits issued to municipalities, industries, and construction sites.

### NR 243 Animal Feeding Operations

Proposed rule changes add the agricultural performance standards and prohibitions in NR 151 to the Animal Waste Management Program authorized by this rule.

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The Department of Agriculture, Trade, and Consumer Protection (DATCP) and the Department of Natural Resources (DNR) are proposing these new rules and regulations dealing with nonpoint source pollution. These rules will have a great effect on agricultural producers, whether they produce livestock, grains, or other products.

It is important to understand that the DNR is charged with developing the performance standards, while DATCP must develop the technical standards. Performance standards are the goals and overriding principles that must be attained by producers. Technical standards are the methods to achieve the performance standards. Therefore, the technical standards are developed around the performance standards

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Comments can be submitted to the DNR in writing until May 5, 2000.

Please submit comments on performance standards to:

Carol Holden  
Department of Natural Resources  
WT/2, P.O. Box 7921  
Madison, WI 53707

Comments can be submitted in writing regarding DATCP's ATCP 50 Rules until April 19, 2000.

Please submit comments on technical standards to:

Don Houtman  
Wisconsin Dept. of Ag, Trade, & Cons. Protection  
Box 8911  
Madison, WI 53708

## The Basin Wrench

*Russell Kiecker  
Area Agricultural Agent  
Burnett, Sawyer, & Washburn Counties*

If any of you have ever tried to fix a leaky or outdated faucet in one of your sinks, you will know how hard it is to take the faucet apparatus off with out a special wrench known as a basin wrench. This wrench is an unusual looking tool. It has a long round handle, and the head is a spring-loaded jaw which dangles off to the side. It looks like a flamingo with a broken neck. I bought one about 25 years ago and can count on one hand the number of times I have used it to solve a problem. But, it sure made the project go a lot easier. It always did its job.

How does this relate to UW Extension Work? In a nutshell, everyone might not need it all the time, but it sure is nice to have around when a problem comes up. The fact that a county agent in any county can draw upon the resources of the entire Land Grant College System is a valuable tool to have in your toolbox. Very nice to be able to put your hands on it when you need it.

This leads me to the next thing I want to talk about. After 30+ years I will be retiring from the UWEX/CES Service. I don't know where all that time went, but it is gone. During that time, I have met literally thousands of people who have sought advice on a wide variety of subjects. I always had a rule, be honest and upfront and diagram the positive and negative points of each solution. I was never too proud to say, "I don't know the answer but I do know someone who does and if you give me a little time to work on it, I will find the solution." Sometimes the information was not what they wanted to hear. Other times, it was like seeing the sun break out from behind a dark cloud. It has been very rewarding and satisfying.

I was asked if agriculture has changed over the 30 years I was a County Agent. The answer is a resounding "yes." The ability of a farmer to make more accurate deci-

sions has definitely increased. The Internet has opened a whole new resource book to farmers. Communication is faster than the eye can blink. Farm financial analysis software has turned farming from a lifestyle into a business, something it has always been but not always recognized. It takes a lot more money to farm now. Operators need to have the usual production skills plus a sound grasp of risk management and capital investment. Margins are very slim and there is not much room for financial mistakes. There is a lot of pressure on farmland. It seem like everyone wants a small piece of the country to call their own. Consequently, our productive farmland is being slowly parceled and divided off. Just how long can this continue? I guess until the supply of food falls short of the demand and people begin to feel hunger. Then, and only then, will our planners and decision makers see what has happened and take steps to reclaim that valuable farm land.

I wish all of you the best of luck in the future. It has been a wonderful experience working with you.

Thank you all for your support and cooperation over the years.



*Russell Kiecker and wife, Pat, as he leaves the office and embarks on his retirement.*

## This Quarter's Events

**April 17, 2000**, tour of Tetzner's on-farm milk processing plant and store. Meet at the Ashland Ag Research Station at 12 Noon. For more information, contact Tom Syverud at 715-682-7268.

**April 27, 2000**, The Pleasing Potato, a UWEX workshop, 6:30 p.m., Spooner Ag Research Station.

**June 10, 2000**, Washburn County Dairy Breakfast, Glen & Brenda Albee Farm (old Larry Klinger Farm), Shell Lake.

**June 17, 2000**, Burnett County Dairy Breakfast, Claire Melin Farm, Grantsburg.

**June 19, 20, & 22, 2000**, Youth Tractor & Machinery Safety Training, 8 a.m. - 4 pm., Spooner Ag Research Station. Pre-registration is required, call 1-800-528-1914 for more information.

**June 24, 2000**, Sawyer County Dairy Breakfast, Clearview Acres, Hayward.

**July 18, 2000**, Crops Production Field Day--Emphasis on Canola, 1 p.m., Ashland Ag Research Station.

**July 20, 2000**, Potato Field Day, 9 a.m. - Noon, Spooner Ag Research Station.

**August 29, 2000**, Hybrid Poplar Field Day, 1 p.m., Ashland Ag Research Station.

# When do we intervene and assist a cow or heifer in labor?

*John Markus  
Area Agricultural Agent  
Bayfield & Ashland Counties*

This question was constantly on my mind during my first year farming when seventy heifers calved. Spring calving season is upon us now and the following information may be helpful.

An issue facing the rancher at calving time is the amount of time heifers or cows are allowed to be in labor before assistance is given. Traditional text books, fact sheets and magazine articles stated the “Stage II” of labor lasted from 2 to 4 hours. “Stage II” is defined as that portion of the birthing process from the first appearance of the water bag until the baby calf is delivered. Newer data from Oklahoma State University and the USDA experiment station at Miles City, Montana clearly show that Stage II is much shorter, lasting approximately 60 minutes in first calf heifers, and 30 minutes in mature cows.

**Table 1. Research Results of Length of Stage II of Parturition**

	No. of Animals	Length of Stage II
USDA (Montana)	24 mature cows	22.5 min.
USDA (Montana)	32 first calf heifers	54.1 min.
Oklahoma State Univ.	32 first calf heifers	63.4 min.

In these studies, heifers that were in stage II of labor much more than one hour or cows that were in stage II much more than 30 minutes definitely needed assistance. Research information also shows that calves from prolonged deliveries are weaker and more disease prone, even if born alive. Also, cows or heifers with prolonged deliveries return to heat later and are less likely to be bred for the next calf crop. Consequently a good rule of thumb: If the heifer is not making significant progress one hour after the water bag or feet appear, examine the heifer to see if you can provide assistance. Mature cows should be watched for only 30 minutes before a rectal examine is conducted. If you cannot safely deliver the calf yourself at this time, call your local veterinarian immediately.

Most ranches develop heifers fully, and use calving ease bulls to prevent calving difficulties. However, a few difficult births are going to occur each calving season. Using the concept of evening feeding to get more heifers calving in daylight, and giving assistance early will save a few more calves, and result in healthier more productive two-year cows to rebreed next year.

### **Proper placement of obstetrical chains:**

To properly use obstetrical chains when assisting with a difficult birth, follow the example pictured to the right. To attach the chain, loop it around the thin part of the leg above the fetlock. Then, make a half hitch and tighten it below the joint and above the foot. Make certain that the chain is positioned in such a manner that it goes over the top of the toes. In this way the pressure is applied as to pull the sharp points of the calves hooves away from the soft tissue of the vaginal wall.

### **Proper chain placement - legs**



*Place loop above and halfhitch below fetlock joint. Connecting chain should be on top of the leg.*

# Farm generator safety

*Source: AgrAbility of Wisconsin  
Plowing Ahead, Winter 2000*

Whether it's for just a precaution for those Wisconsin winter storms, many farms are already equipped with standby electrical power generation systems. They may be either tractor PTO powered or stationary internal combustion engine powered generators. Follow these tips to safely use your generator.

- > Connect the generator to the farm wiring system with an approved transfer switch. This switch disconnects the farm from the utility lines while the generator is connected to the farm wiring system. Contact a certified electrician or your power supplier to make sure approved switching equipment is installed correctly, and that the grounding system is intact.
- > Anchor the generator and engine securely to a concrete base. The generator and engine produce a large twisting force. Consult the generator manufacturer for recommended anchoring methods.
- > Protect the generator from the weather. Remember also to provide proper ventilation for the exhaust from the engine as well as waste heat from the engine and generator. Air inlets and outlets for exhausting waste heat should be sized at least 1/2 square foot for each kilowatt of generator capacity.
- > Protect the engine air intake and cooling system from blowing snow, insects, rodents, or other things that could block airflow.
- > Run the generator periodically to make sure that it is in working order

# Managing your on-farm fertilizer account

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

As the debate continues on regulating farmers on nonpoint source pollution, specifically nutrient management I think it is important as farmers that we take a look at why this is important. Regulations aside, there is some sound economics into managing on farm nutrient sources. Based on University research, and on-farm demonstrations it has been shown that manure can account for as much as \$8,800/year worth of fertility from a 100 cow dairy.

This estimate was calculated using the values of nutrients from manure in the table to the right.

The value of manure from **one** dairy cow can be looked at like this:

The average dairy cow produces about 120 lbs of manure a day. If she poops on average 15 times a day that would be 8 lbs of manure every time she lifts her tail. If every ton of manure has 3 lbs of nitrogen fertilizer, a dairy cow would produce about 0.18 lbs (120/2000 x 3) of nitrogen fertilizer per day. The current nitrogen fertilizer price is \$0.22/lb. Therefore every time that cow lifts her tail she is depositing \$0.003 (0.18/15 x \$0.22) just in nitrogen. The phosphate and potash fertilizer deposits made by that one cow every time she lifts her tail would be \$0.002 and \$0.004. One cow then would deposit \$0.14/day into your on farm fertilizer account. By then end of the year she has deposited \$51.10 into your fertilizer account.

Young stock and calves will also be making daily deposits into your on farm fertilizer account, but a lower rate.

How you manage those deposits can be very important. Are you getting the most out of your on farm nutrient account?

Approx. 1st & 2nd year available nutrient content with 2nd year in brackets [ ]				
	N	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
<b>Dairy Manure</b>				
Solid (lb/ton)	3 [1]	4 [1]	3 [0]	8 [1]
Liquid (lb/1000 gal)	8 [3]	10 [3]	8 [1]	21 [3]
<b>Beef Manure</b>				
Solid (lb/ton)	4 [1]	4 [2]	5 [1]	8 [1]
Liquid (lb/1000 gal)	10 [4]	12 [4]	14 [2]	23 [3]
<b>Swine Manure</b>				
Solid (lb/ton)	4 [1]	5 [1]	3 [1]	7 [1]
Liquid (lb/1000 gal)	22 [6]	28 [5]	15 [3]	26 [3]
<b>Poultry Manure</b>				
Solid (lb/ton)	13 [2]	15 [3]	14 [2]	9 [1]
Liquid (lb/1000 gal)	35 [7]	41 [7]	38 [7]	25 [3]

Manure Output			
Animal & Size		lb/day	tons/year
<b>Dairy</b>	(1400 lb)	120	21.9
<b>Beef</b>	(1250 lb)	75	13.7
<b>Swine</b>	(200 lb)	12	2.4
<b>Poultry</b>	(4 lb)	.021	0.038

## Chain saw safety

*John Markus  
Area Agricultural Agent  
Bayfield & Ashland Counties*

Do you know approximately what percentage of all woods accidents in a year are typically the result of a chain saw cut?

*30 percent*

Do you know how fast a chain saw blade can move at full throttle?

*45 mph*

Do you know which age group of operators are at the greatest risk for injury?

*Younger operators*

Do you know how many of all chain saw accidents could be prevented?

*Almost all of them*

Chainsaws are powerful tools that make our job of cutting firewood and fallen trees and removing small trees much easier. But their power makes them very dangerous tools. Most accidents are the result of a

moving chain contacting the operator in some way.

The good news for you is that there are several things you can do to keep yourself from becoming a victim. You Are the Most Important Factor of Your Own Safety

### How?

1. Know your saw and how to operate it before you use it. That means reading and understanding your operator's manual. If there are instructions you do not understand, talk to your chain saw dealer or to someone who is very familiar with how to use your chain saw.
2. Take the time to prepare for the job. This includes several factors discussed in this information fact sheet and probably in your owner's manual.
3. Practice! Begin with logs on which you can make trial cuts to get the feel of your saw and the way it handles.
4. NEVER WORK ALONE! At least be within yelling distance of help.

Even if you have used your saw a few times before, or you've used it once a year for the past several years, these are still important steps to take and precautions to think about.

### Anti-Kickback Devices

*Chain brake* stops the chain if kickback occurs. This can mean the difference between possibly a speed of 45 mph and 0 mph if the chain actually contacts you.

*Throttle interlock* prevents the throttle from accidentally advancing or inadvertently moving by automatically returning the throttle and chain to idle when the trigger button is released.

*Hand guard* will keep the left hand from slipping into the chain.

*Balance* is not a device, but something to look for. You can maintain better control over the saw that is well balanced in your hand if kickback occurs.

*Anti-kickback chains* reduce the forces on the chain that cause kickback.

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

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## ASHLAND • BAYFIELD • DOUGLAS • IRON COUNTIES

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*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