

Agricultural Newsletter

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



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Removable Insert:

Farm Service Agency Update

Cover Crops Field Day to be Held

Spoooner Ag Research Station, Oct 12

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

On Thursday, October 12 from 10 AM until noon a cover crops field day will be held at the Spoooner Agriculture Research Station located east of Spoooner on Highway 70.

The field day will highlight various cover crops that were planted in early September following spring wheat harvest. Cover crops planted include oats, winter rye, crimson clover and tillage radish.

The field day will allow participants to see first-hand the various cover crops and cover crop mixes that were planted in production fields and smaller research plot plantings.

Cover cropping is the new 'buzzword' these days in the farming community, and recent surveys show that more and more farmers are embracing cover crops as a legitimate way to improve soil health and profits. Successful and cost effective establishment of cover crops is essential and can be especially challenging in NW Wisconsin. This field day will give farmers and others interested in cover crops an opportunity to see these crops in action.

In addition, participants can also learn more about some of the other crop research that is being conducted at the Spoooner Agriculture Research Station including organic soybean no-till planted into crimped and rolled winter rye, white mold research on food grade soybean varieties, and a look at our corn and soybean variety trials.

The field day discussion and tour will be co-led by Phil Holman, Agronomy Researcher and Superintendent of the Spoooner Ag Research Station and by Kevin Schoessow, UW-Extension Area Agriculture Development educator. There is no cost to attend. For more information contact the either Phil or Kevin at the Spoooner Agriculture Research Station at 715-635-3735.



Agricultural NEWSLETTER

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If you have any special needs or require
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Research Station, W6646 Highway 70,
Spooner, WI 54801 or UWEX Area
Agricultural Agent, Ashland Ag Research
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54806.

Growing Degree Shortage this Year

*Phil Holman
Superintendent
Spooner Ag Research Station*

As of October 2nd, the Spooner Ag Research Station has had 2100.5 growing degree days (GDU). The 30 year average for Spooner is 2368 GDUs, A growing degree day is calculated by averaging the high temperature and low temperature and subtracting a base number of 50 (in most crop production). The high temperature maximum is 86 and the low temperature minimum is 50. If it is too hot--above 86°F--the plant can't respire fast enough to mature normally. Similarly, if it is too cold, below 50°F, the plant slows maturity as well.

While GDUs have been related to corn maturity and seed companies many times list needed GDUs next to the RM (Relative Maturity). Joe Lauer, UW-Extension Corn Specialist wrote in 2014 that: "GDUs are important, but daylength (actually it is night-length) becomes more important and drives development." Soybean Researchers note the same night-length importance to physiological development of the soybean maturity.

For research plots here at the station, corn silage harvest was a week to 10 days behind normal. Similarly, I rate the soybean variety trials for physiological maturity (R8 = 95% of pods have reached their full color). I usually start these ratings mid September and this year is right on track with previous years.

Thus, the impact of the cool summer won't fully be known until we get to harvest. So far the irrigated corn silage plot yield weights are in line with a good growing season but we won't know for certain until samples are dried to know the tons of dry matter yields.

Fall is Still a Good Time to Sample for SCN and Other Parasitic Nematodes

*Ann MacGuidwin, Damon Smith and Shawn P. Conley
University of Wisconsin-Madison*

The WI Soybean Marketing Board (WSMB) sponsors free nematode testing to help producers stay ahead of the most important nematode pest of soybean, the soybean cyst nematode (SCN). Eggs of SCN persist in the soil between soybean crops so a sample can be submitted any time that is convenient. The soil test report indicates the number of eggs in the sample and is useful for selecting the right variety for the next soybean crop. Retests of fields planted with SCN-resistant varieties over multiple years shows how the nematode population is responding to variety resistance and provides an early warning should the nematode population adapt to host genetics.

For more information on SCN testing and management practices or to request a free soil sample test kits please contact: Jillene Fisch at (freesctest@mailplus.wisc.edu) or at 608-262-1390. Remember the first step in fixing a nematode problem is to know if you have one! The WSMB sponsored nematode testing program provides you that opportunity.

Putting Farm Safety into Practice, Silage and Grain Harvest

John Shutske

Agricultural Engineering Specialist

UW-Madison Biological Systems Engineering Department

A modern farm can be a dangerous and unforgiving place. Late summer and fall are high-risk times as harvest operations ramp up quickly. In Wisconsin, we always have tight time windows to get hay, silage, and other crops harvested and put into storage to make it through the year. It's that urgency and time pressure that can contribute to mistakes that often leads to injuries or even death. Machinery plays a major factor in serious farm injuries. Here are some ways to put safety into practice!

Think Like a Pilot – Or, a NASCAR Driver

The best way to prevent harvest season injuries is to invest prep time to get your equipment ready for the busy season. Adjustments and maintenance that improve safety also can also help maximize the quality and value of your crop.

As a farm owner, manager, or operator, think of your role the same way an airplane pilot or race car driver would. That means you need to establish something like a pre-flight or pre-race checklist — a run-through and shakedown to make sure all systems are “go.”

Consult your operator's manuals. Are shields in place – on tractors, choppers, blowers, wagons, combines, and augers? Replace any questionable hydraulic hoses and know the status of any bearings and belts that you know might need to be repaired during the season. Many terrible farming injuries happen when a breakdown occurs. People get super-stressed or frustrated and then do something that they know might be dangerous. Also make sure to carry a fully-charged, 10-pound ABC dry chemical fire extinguisher on all machines including trucks.

Gear Up for Highway Travel

Minimizing the time you spend on the highway is always the best way to reduce hazard levels. However, that's often not practical. As we roll into fall with fewer daylight hours upon us, make sure SMV emblems are bright and clean and that all flashers and lights are fully operational. Plan highway travel whenever possible to avoid busy rush times including the early morning commute and the rush to school. Evening times are high risk as people are in a hurry to get home from work or school and the sun gets low in the sky. Make sure you fully understand and comply with all other state and local lighting, marking, width, and weight limit laws.

Train, Coach, & Create Expectations with Your Employees

Many farms have hired workers who help with harvest – As an employer, spend time with them. Talk about your safety expectations. A few of our larger farms now publish a monthly or bi-weekly newsletter, often available in English, Spanish and other languages. Operator's manuals and safety decals are a great source of information. The same is true if you're hiring custom harvest work. As a farm owner and operator, you must create and expect a culture of safety. With everybody involved in the operation, demonstrate and walk through safe procedures. Show people what to do if something unexpected happens. Make sure everyone involved in the operation has a reliable way to communicate. But realize that if it's a smartphone, steps need to be taken to make sure people are not distracted by phone use.

For more information on ways to make your farm a more safe and healthy place to work, check out the UW Agricultural Safety and Health Center website at: <https://fyi.uwex.edu/agsafety/>.



FDA Animal Drug Safety Communication: Micotil 300 User Safety Alert

The U.S. Food and Drug Administration is alerting cattle and sheep owners, farmworkers, veterinarians, physicians, emergency medical technicians, and other health care providers about the potential hazards to people exposed to the animal drug Micotil 300 (tilmicosin). Micotil 300 is a prescription injectable antibiotic used to treat respiratory disease in cattle and sheep.

Since its approval in 1992, there have been more than 2,200 adverse event reports involving people exposed to Micotil 300. These include multiple reports of injury, including death, in people following injection of Micotil 300. Other routes of exposure, including by mouth or skin, have also led to injury. Most of the reported human exposures were accidental and many cases required medical attention. While the circumstances remain unclear in some cases, there have been 25 reports involving human death. Although a majority of the deaths were due to intentional self administration of the drug, some deaths were reported following accidental injection.

People exposed to Micotil 300 should immediately seek medical care. There is no antidote for Micotil 300. This drug has been shown to have toxic effects on the human heart. In some cases of exposure, people required hospitalization and prolonged medical care; some people have died despite receiving medical care. Injections in people of less than 0.5 ml (1/10 teaspoon) have been associated with pain and

bleeding at the injection site, while larger volumes have been associated with nausea, dizziness, rapid heart rate, and death.

Elanco Animal Health, a subsidiary of Eli Lilly and Company, distributes Micotil 300 and has made efforts to warn and educate people about the human health risks associated with this product and to provide training to users and veterinarians on safe handling and use of Micotil 300. Elanco is currently working in consultation with the FDA to further address this issue.

It is crucial that every person who handles Micotil 300 has been appropriately trained to use the drug safely, and understands the risks to people handling this drug. Livestock environments can be unpredictable and potentially hazardous. This can increase the risk of accidental exposure to Micotil 300. The prescribing information for Micotil 300 includes important information for users in a section called **SAFE HANDLING PRACTICES WHEN USING MICOTIL® 300 TILMICOSIN INJECTION**.

FDA encourages you to report any adverse events in people associated with the use of Micotil 300. Human adverse experiences should be reported to Rocky Mountain Poison and Drug Center (RMPDC) at 1-800-722-0987 or Elanco Animal Health at 1-800-428-4441. For information about adverse drug experience reporting for animal drugs, contact FDA at 1-888-FDA-VETS or online at <https://www.fda.gov/>

[AnimalVeterinary/SafetyHealth/ReportaProblem/ucm055305.htm](https://www.fda.gov/AnimalVeterinary/SafetyHealth/ReportaProblem/ucm055305.htm).

The labeling for Micotil 300 (NADA 140-929) contains the following boxed warnings presented in English and Spanish:

Human Warnings: Not for human use. Injection of this drug in humans has been associated with fatalities. Keep out of reach of children. Do not use in automatically powered syringes. Exercise extreme caution to avoid accidental self-injection. In case of human injection, consult a physician immediately and apply ice or cold pack to injection site while avoiding direct contact with the skin. Emergency medical telephone numbers are 1-800-722-0987 or 1-800-428-4441. Avoid contact with eyes.

Note To The Physician: The cardiovascular system is the target of toxicity and should be monitored closely. Cardiovascular toxicity may be due to calcium channel blockade. In dogs, administration of intravenous calcium offset Micotil-induced tachycardia and negative inotropy (decreased contractility). Dobutamine partially offset the negative inotropic effects induced by Micotil in dogs. β -adrenergic antagonists, such as propranolol, exacerbated the negative inotropy of Micotil in dogs. Epinephrine potentiated lethality of Micotil in pigs. This antibiotic persists in tissues for several days.

Harvest Considerations for Variable Soybean Maturity

Shawn Conley
Soybean and Wheat Extension Specialist
University of Wisconsin-Madison

Variable soil types, knolls, flooding and ponding, variable planting dates and late season drought have left many growers with extreme in-field variability of soybean maturity. There are areas in fields where the soybean seed is 13% or less moisture adjacent to areas with green seed. The prevailing question is “When should the grower harvest?” Obviously there is no simple answer, as each field is different. However here are a set of guidelines to consider:

1. The easiest answer is harvest the field at two different times. Take what is dry today and come back in two weeks and harvest the rest. The challenge with this approach is that today’s equipment is large and not easily moved from field to field. Furthermore many growers rent or own land over large areas where this is impractical and the whole field must be taken at once. So.....

2. The next simple answer is wait until the whole field is ready to go. As noted in a past article entitled Drought Induced Shatter, we are seeing areas across the Midwest where shattering is occurring. The general rule of thumb is 4 seeds per square foot = one bushel yield loss. At local cash prices below \$9.00 per bushel this is hard to see happen and not harvest. Furthermore, waiting will also lead to moisture loss in the field. As we learned the past few years, you do not get compensated for harvesting below 13% moisture. So.....

3. If growers are concerned with shatter and/or other harvest losses the next logical approach is harvest ASAP. This opens a whole new can of worms. Harvesting ASAP will lead to a mixture of dry, wet, and immature (green) soybean seed. Be aware that if you harvest this mixture regardless of the ratio, your combine moisture sensor may not detect the correct moisture, be prepared for that initial shock when the elevator tests the grain. Next be prepared for the dockage. Most combines will leave more beans in the pod when they are wet or immature. These beans may end up on the ground or in the grain tank as unthreshed soybeans. Harvesting seed with this variability will be very similar to handling frosted soybean seed so discounts may occur due to moisture shrink, damage (green beans are considered damage), foreign material (this is usually higher when harvesting wet beans), test weight, and heating. If you choose on farm storage to address some of the dockage concerns please refer to Soybean Drying and Storage for questions.

4. The last consideration I would bring forward is that the mature areas are likely going to be the low yielding pockets due to drought whereas the yet to mature areas will likely be the higher yielding areas within the field. So, in short, which yield environment would you rather focus your time and efforts to protect?

2017 Cover Crop Survey Analysis

From: USDA North Central Region
Sustainable Agriculture Research & Education

Following the use of cover crops, farmers reported increased yields of corn, soybeans and wheat, and improvement in the control of herbicide-resistant weeds, according to a nationwide survey. In addition, the survey of 2,012 farmers showed acreage planted in cover crops has nearly doubled over the past five years.

Survey participants—88 percent of whom use cover crops—reported that after cover crops:

- Corn yields increased an average of 2.3 bushels per acre, or 1.3 percent;
- Soybean yields increased 2.1 bushels per acre, or 3.8 percent;
- Wheat yields increased 1.9 bushels per acre, or 2.8 percent.

This marks the fifth consecutive year in which the survey reported yield increases in corn and soybeans following cover crops (find previous surveys at www.sare.org/covercropsurvey). It is the first year the survey team was able to calculate the impact of cover crops on wheat yields. The poll was conducted by the Conservation Technology Information Center (CTIC) with help from Purdue University and funding support from SARE and the American Seed Trade Association (ASTA).

Pre-Conditioning Records Help Promote Your Calves

With tight profit margins in the cattle finishing sector, many buyers prefer to purchase calves that have been pre-conditioned. They value knowing that a group of calves is at lower risk for sickness and morbidity because they have been well prepared, through a pre-conditioning program. This information may result in higher prices for the calves, but only if it is shared with potential buyers.

A solid pre-conditioning program also helps you build a positive reputation for your calves. So the question becomes...Are you promoting your feeder calves the best that you can?

Are you pre-conditioning your calves? If so, are you making sure that potential buyers know that you have invested your time and resources into making sure these calves are ready to transition smoothly to the next phase of beef production? This means sharing what you have done with potential buyers either with/ through your marketing partner.

If you are pre-conditioning your calves and not sharing this information, you may be leaving money on the table.

Common requirements of high level pre-conditioning programs:

1. Owned by seller for at least 60 days (for stocker calves)
2. Weaned a minimum of 45 days
3. Bunk broke and broke to water tank or fountain
4. Vaccinations (all given in front of shoulder) per Beef Quality Assurance Guidelines
5. Dewormed with product that kills inhibited *Ostertagia* given at time of weaning and or within 90 days of sale.
6. Treated with product that kills lice and grubs (grub control subject to time of year requirements)
7. Dehorned - all horn tissue including scurs should be removed and or burned
8. Castrated with any method (knife preferred) until 4 months of age. If over 4 months of age at time of castration, knife method is strongly encouraged
9. All surgical procedures completed at least 30 days before sale and all surgical wounds healed
10. All vaccinations and boosters administered at least 14 days (21 days preferred) but no more than 90 days before sale of cattle
11. If implanted, give product name and date administered
12. Read and follow all product label directions.
13. All procedures done in accordance with Beef Quality Assurance Guidelines

Optional Procedures

1. Additional vaccines for:
 - A. Brucella (heifers only)
 - B. Haemophilus
 - C. Leptospira
 - D. Pinkeye
2. Coccidiostat fed
3. Heifers aborted
4. Third party verification of procedures



For More information visit the Wisconsin Beef Info Center at fyi.uwex.edu/wbic.

2018 Weed Management Starts During Harvest 2017

*Daniel H. Smith
Nutrient and Pest Management Program
University of Wisconsin-Madison*

As we approach fall and harvest fields that may have weed escapes, we should have a plan to limit the spread of weed seeds. Weed seeds can easily be spread through harvest and tillage equipment. Taking the time to clean equipment before moving to the next field or bringing to the farm for the first time can be a worthwhile investment with many advantages. For example, a single common waterhemp can produce 250,000+ very small seeds that can easily be stored on equipment and redistributed in fall field operations. Regardless of the weed species, avoiding the spread of the weed seed is necessary to prevent future costly weed management problems. Avoiding very heavy weed infestations and consider harvesting or tilling these areas last, especially when herbicide resistant weed species are present.

Combine Cleaning

The combine operation manual should be reviewed prior to any cleaning produce. Always read, follow, and understand the manual and related safety instructions. Cleaning a combine will produce a lot of dust and debris and personal protective equipment should be used. A clean combine may also reduce the risk of a fire occurring during a busy harvest season.

Combine cleaning can be very time consuming, and a thorough cleaning should be done prior to storage or when combining a field of identity preserved grain. A quick field cleaning operation can be done with a leaf blower or an air compressor. Cleaning the head, feederhouse, rock trip, threshing and separating unit, sump on the unloading auger, and grain tank will help reduce the chance of spreading weed seeds. Removing any residual debris on the outside of the combine, engine bay, and residue management system is also necessary. Investing 30 minutes in combine cleaning after harvesting a weedy field will reduce the chance of spreading problematic weed populations to other fields.

Tillage Equipment

Soil on tillage equipment may also contain weed seeds and should be removed before transport. Although time consuming, removing as much soil as possible from tillage equipment and equipment tires will lessen the chances of transporting weed seeds from field to field. Avoid weed seed movement to help control future costs of weed control and herbicide resistance management.

More information on herbicide resistance management:: http://wcws.cals.wisc.edu/wp-content/uploads/sites/4/2013/03/WCWS_205_herbicide_resistance_management_WEB.pdf.

This Quarter's Events

Contacts: UW-Extension Ag Agent Kevin Schoessow, Spooner Station, 715-635-3506, Jane Anklam, Douglas Co, 715-395-1363, Jason Fischbach or Matt Cogger, Ashland & Bayfield Counties, 715-373-6104, Tim Jergenson, Barron Co, 715-537-6250 for more information.

Oct 12, Thurs - Cover Crops Field Day, Spooner – 10am-noon. Spooner Ag Research Station. Free and open to the public.

Oct 14, Sat – Kids & Cows Family Day, Rice Lake – Fairgrounds, N. Wis. Beef Producers, contact Lori Lyons, 715-210-0049.

Oct 16, Mon - On-line Auction, Spooner - Miscellaneous forage equipment, fencing, and sheep equipment including sheep milking parlor and bulk tank. Spooner Ag Research Station. Visit Hager Auctions website at <http://hagerauction.hibid.com/auctions/current>.

Nov 7, Tues - Pest Management Update Meetings — Chippewa Falls, 9 a.m.-12 p.m., Lake Hallie Eagles Club, 2588 Hallie Road. Contact: Jerry Clark, UW-Extension Chippewa County, 711 N. Bridge Street Chippewa Falls, WI 54729; (715) 726-7950.

Dec 7-8, Thurs-Fri - Midwest CSA Conference, Wisconsin Dells at Chula Vista Resort. Early Bird registration for the Midwest CSA Conference is \$135/person. Bring additional people from your farm or organization for the discounted rate of \$95 each. Visit www.midwestcsa.com or call Wisconsin Farmers Union at 715-723-5561.

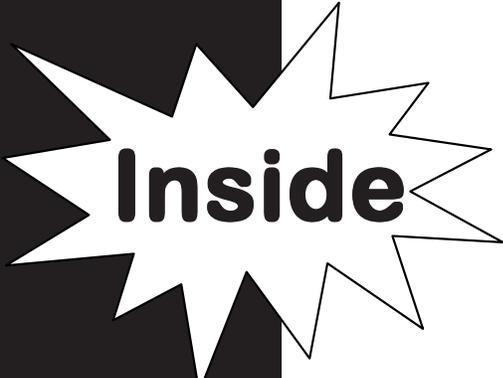
Hay and Trucking Donations Needed for North Dakota Livestock Farmers

BISMARCK – The North Dakota Department of Agriculture (NDDA) and North Dakota State University (NDSU) N.D. Agricultural Experiment Station are working together to provide relief to livestock producers affected by drought. The agencies have set up a location near the NDSU campus in Fargo to accept hay donations, which will then be offered to eligible producers in a hay lottery.

Any other individuals or organizations willing to donate hay or trucking for the hay lottery should call NDDA's Drought Hotline at 701-425-8454 to get information about delivery to the NDSU site.

Wisconsin farmers wanting to sell or donate hay can also list their hay on the North Dakota State University Feedlist website. To access the website do an internet search on "feedlist NDSU" or type in https://www.ag.ndsu.edu/info/fl_new.

For cash and other services donations individuals can contact Farm Rescue PO Box 28, Horace, ND 58047 or phone (701) 252-2017 or email info@farmrescue.org.



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Kevin Schoessow
UWEX Area Agricultural Agent