



Farm & Field

Chippewa Valley Agriculture Newsletter

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Good Day!!

Corn silage harvest has swung into high gear across the area in the past two weeks and early yield reports are good. We've yet to receive a widespread "killing frost" and we certainly needed extra time this year with the lack of heat units and slower than normal crop growth.

I had intended to send a September newsletter, but it is budget time in county government and I just ran out of time to get one put together in a timely manner.

In mid-August my wife Kathy and I had a new addition to our home when my 96 year old aunt moved from Iowa to live with us. We have all had to make adjustments to our daily schedules and we are doing well so far. My aunt reminds me that she and my Grandmother took care of me when I was a baby. I tell her that history can repeat itself and this is our turn to return the favor.

As corn and soybean harvest progress, please make sure that you and your machinery are ready to go to the field and that safety is always on your mind. Have a safe harvest season!!

"Continue to Farm Smarter"

Mahlon Peterson

Mahlon Peterson
 UW-Extension Agricultural Agent

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Calendar

October

- 4 Farm City Day - Schafferland Farms
- 7 Eau Claire County Conservation Speaking Contest - Beaver Creek Reserve
- 14 Eau Claire & Chippewa County Land Judging Contest
- 27-29 Western District Swine Producer Meetings

Please call our office for more details, registration information, etc.

Costs of Production Will Be Key for 2009

Input costs for crop production increased significantly in 2008 and it looks as if that trend will continue for the 2009 crop and beyond. I talked about these issues at a series of meetings in mid-September. Fertilizer, seed, pesticides, fuel and rental rates all climbed this year and most of those prices have increased significantly as the year has progressed. Fertilizer prices have doubled from spring time prices. The economists I have heard speak in the past month think that today's \$4.50 per bushel corn price is yesterday's \$2.00 per bushel price and the same for soybeans. Starter fertilizer priced at \$1200.00 per ton today means that 100 pounds of starter applied per acre will cost you \$60.00 per acre. Make sure you use some risk management tools to aid your decision making.

For more Extension Information go to our website:
www.uwex.edu/ces/cty/eaucnaire/

Something To Chew On . . .



*Mahlon Peterson Ag Agent
Eau Claire County*

Watch Out For Slow Moving Farm Equipment On Rural Roads

As the harvest season gets rolling, people driving on rural roads are likely to encounter slow moving farm vehicles. That means it's time for all drivers to be especially vigilant and careful.

It's legal to drive farm machinery on public roads. It's often the only way farmers can get from field to field. But the mix of slow traveling farm equipment and speedier cars poses hazards.

Cheryl Skjolaas, University of Wisconsin-Extension agricultural safety specialist, says drivers must remember that farm equipment is big, slow and not very maneuverable.

"It's important to be alert and remember that these farm vehicles don't behave like cars and trucks when it comes to speed, turning or braking," Skjolaas said.

She reminds people operating farm vehicles to take precautions as well.

"If you have to move equipment on public roads, it's a good idea to check out the route ahead of time so you know where the hazards are," Skjolaas said. "Try to move the equipment at a time of day when the traffic is light. And be sure to replace any broken lights, clean the 'slow moving vehicle' or SMV sign and make sure you're as visible as possible."

Skjolaas offered some tips and reminders for people driving cars on rural roads:

Farm machinery that goes less than 25 miles per hour (mph) should display an orange 'slow moving vehicle' or SMV emblem on the back.

Alternatively, the equipment may have an amber strobe light.

-- An automobile traveling at 55 mph will catch up quickly with a piece of equipment going 25 mph or less. That means automobile drivers should slow down as soon as they see farm equipment on the road ahead.

-- The farm vehicle operator may not be able to see around the equipment, so don't assume that the operator knows you are approaching.

-- Farm equipment operators are not required to drive on the road shoulders. If safe, the farm machinery operator may pull off to allow traffic to pass. Sometimes, wide machinery will need to move completely onto the road to avoid a mailbox or some other roadside hazard.

-- Some wide equipment may extend into the oncoming traffic lane.

-- Farm machinery may not have brake lights or turn signals.

-- Farm machinery crossing the road moves slowly and may be pulling equipment that will take longer to clear the road.

A majority of farm equipment and motor vehicle crashes occur when the farm equipment operator slows down to turn and the motor vehicle operator moves to pass. When you pass farm machinery, make sure the driver is not about to turn left. Before you decide to pass, look for driveways into farms or fields where the farm vehicle operator could be turning. Also, make sure the road is wide enough and watch for road-side obstacles such as mailboxes that might cause the equipment operator to drift to the left. In addition, make sure that you have enough time and distance to pass safely. It is illegal to pass farm equipment in no passing zones.

Farmer Co-ops Conference to Focus on Cooperative Strategy and Finance

The University of Wisconsin Center for Cooperatives will hold its 11th Annual Farmer Cooperatives Conference on Nov. 18-19, 2008 in St. Paul, Minnesota. The topic of this year's conference is "Cooperative Strategy, Structure, and Finance."

As farmer-owned cooperatives adapt to ongoing changes in the business of agriculture, they are presented with many strategic dilemmas. "Today's farmer cooperatives must pursue growth opportunities to remain competitive, and simultaneously assume more risk to meet supply chain cost pressures," explained Anne Reynolds, assistant director of the UW Center for Cooperatives. "The equity and capital management issues that result are major drivers for a cooperative's strategic planning and decision-making process." This year's exciting program will explore the innovative structural and financial strategies that cooperatives are adopting to meet these challenges.

The national conference, Reynolds noted, offers a unique opportunity for cooperative board members, CEOs, and others doing business with agricultural cooperatives to explore these issues. Experienced cooperative business leaders and knowledgeable experts will share their insights on topics that include: strategies for growth, managing risk, cooperative finance strategies, and case studies of equity and finance strategies employed by individual cooperatives.

For over a decade, the Farmer Cooperatives Conference has provided a stimulating forum for those in the agricultural cooperative

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Mahlon Peterson Ag Agent
Eau Claire County

community to learn and exchange ideas. The annual program is organized by the University of Wisconsin Center for Cooperatives, with assistance from a national planning committee of cooperative scholars and practitioners.

This year's conference is made possible by the generous support from sponsors including CoBank, Farm Foundation, CHS Foundation, Dorsey and Whitney LLP, Land O'Lakes, Lindquist & Vennum PLLP, Stoel Rives LLP, The Cooperative Foundation, NCFE Educational Foundation, West Central Cooperative, and Clifton Gunderson.

The annual meeting of NCERA-210, which promotes and coordinates research on agricultural cooperatives, will follow the Farmer Cooperatives Conference on Nov. 19 and 20, at the same location.

Updates on the conference and registration information will be posted on the University of Wisconsin Center for Cooperatives website at www.uwcc.wisc.edu/farmercoops08. Questions about the conference can be directed to Anne Reynolds, University of Wisconsin Center for Cooperatives, (608) 263-4775, atreynol@wisc.edu.

NCR-SARE Announces 2008 Farmer Rancher Grant Call For Proposals

The 2008 North Central Region Sustainable Agriculture Research and Education Program (NCR-SARE) Farmer Rancher Grant Call for Proposals is now available online at <http://www.sare.org/NCRSARE/prod.htm>.

Farmers and ranchers in the North Central Region can submit proposals for grants to support sustainable agriculture project ideas. Projects should emphasize research or education/demonstration. Individual farmers can get grants up to \$6,000 and groups of 3 or more farmers can receive grants up to \$18,000.

NCR-SARE expects to fund about 50 projects in the twelve-state North Central Region with this call.

The SARE Farmer Rancher Grant Program will now accept project proposals by email. NCR-SARE is now asking applicants to complete a brief budget narrative in their project proposal. Also, beginning farmers and/or youth may apply.

The deadline for proposals is Monday, Dec. 1, 2008 at 4:30 p.m.

Potential applicants with questions can contact Joan Benjamin, NCR-SARE Farmer Rancher Grant Program Coordinator, at jbenjamin2@unl.edu or 402-472-0809. Applicants can also contact the Wisconsin SARE Coordinator, Diane Mayerfeld at dbmayerfeld@wisc.edu or 608-262-8188.

The NCR has funded more than 650 farmer rancher grants worth more than \$4,300,000 since the inception of this program. One of the recent SARE

Farmer Rancher Grant recipients in Wisconsin is Heather Smith, who runs a Community Supported Agriculture vegetable farm in Buffalo County. She received a grant to evaluate the effectiveness of using interns to meet seasonal labor needs.

"The grant allowed us to focus on making the internship experience rewarding for the interns as well as meeting the labor needs of our farm," said Smith. "It was great to see the very positive evaluations we got from our interns at the end of the season. Another benefit of the grant is that SARE encouraged us to make contact with farmer networks like the Land Stewardship Program, so we can share what we learned and can also share the work of finding and creating experiences for interns."

Another recent grant recipient is Jim Stute, who farms in Walworth County. He is using the grant to test alternative cover crops for his corn-soybean-winter wheat rotation. Stute notes that the funding from SARE allows him to try cover crops that have been used in other areas but don't have a track record in Wisconsin.

More information about the SARE program is available at www.sare.org.

Horticulture News

Erin LaFaive ~ Eau Claire County Horticulture Educator

What is Sucking the Life out of my plants? Spider Mites



Spider mites can affect houseplants and outdoor plants. They are very tiny soft bodied mites that pierce plant cells with a mouth part that sucks the juices out. Spider mites are so small a magnifying glass or microscope is needed to clearly see the mites. With the naked eye spider mites are clear or red dots moving about on the plant. Their vast numbers, from being able to reproduce quickly, allow them to be more visible. Another sign of spider mite infestation is the presence of a fine webbing.

Some symptoms of spider mite infestation include stunted plant growth, bronzing or yellowing of the leaves, a white dotted or yellow stippled appearance, and with extreme infestations death of the plant.

Spider mites prefer dry and warm conditions. When this type of weather condition persists, outdoor plants become more susceptible. Indoor conditions can become warm and dry especially during winter when humidity is low.

Keeping outdoor plants well water during dry periods helps plants affected by spider mites maintain health as the mites remove fluids from the plant. The preferred part of the plant to feast on is new growth because it's softer and easier for the spider mite to pierce. Over fertilizing can cause excessive new growth creating optimal conditions for mites to feast on.

If using an insecticide for spider mite problems look for miticides and

please read the label carefully. Sevin is not effective at killing spider mites. Natural predators for spider mites are ladybugs, lacewings, and syrphid flies.

Plant small-throated flowering plants in the garden to attract aphid predators. These plants include dill, daisy, sunflower, yarrow, marigold, zinnia, candytuft, and goldenrod. Although not a researched method, some people find a mixture of dish soap and water as a spray to be effective at getting rid of spider mites. Also, spraying the mites off with a garden hose helps to wash off the mites and kill them. Others simply remove and kill the spider mites with a cloth.

The hundreds of species that exist are host specific therefore if they are infesting one plant species it doesn't necessarily mean they will affect other plants nearby.

Sources: UW Extension factsheets; Mary K. Small and Karen L. Panter, "Landscape Pests: Integrated Pest Management Strategies for Controlling the Dastardly Dozen".



Randy's Rumors . . .

Randy Knapp, Chippewa County Agricultural Agent



Corn Silage and Alfalfa in Dairy Rations

As our dairy herds have grown larger, dairy producers have been feeding their lactating cows a higher proportion of corn silage relative to alfalfa than was common in the past. Some of the factors partially responsible for this trend include:

Good corn silage and alfalfa compliment each other well in dairy rations. Their nutritional characteristics are

- More tons of dry matter and energy per acre
- Improved corn silage hybrid
- More consistent forage quality
- Nutrient management of manure
- Rapid filling of horizontal silos
- High degradability of alfalfa protein
- Problems with winter-kill of alfalfa

presented in Table 1. Combining corn silage and alfalfa in dairy rations at moderate rates helps minimize deficiencies or excesses that may result from feeding either forage at a very high rate or as the sole forage.

Table 1. Nutritional characteristics of good quality corn silage vs. alfalfa.

<u>Content or trait</u>	<u>Corn Silage</u>	<u>Alfalfa Silage</u>	<u>Alfalfa Hay</u>
Moisture	High	Moderate to High	Low
Acidity	High	Moderate	Low
Buffering Capacity	Low to Moderate	High	Moderate to High
Bunk Stability	Low	Moderate to High	High
Starch	Moderate to High	Low	Low
Energy	High	Moderate to High	Moderate to High
Protein	Low	High	High
DIP ¹	Low	High	Moderate to High
Macro-mineral	Low	High	High
ADF	Low	Moderate	Moderate
NDF	Moderate	Moderate	Moderate
Effective Fiber	Low to Moderate	Moderate to High	High

¹Degraded intake protein as a % of DM.

CORN SILAGE vs. ALFALFA SILAGE AND LACTATION PERFORMANCE

Researchers at the U. S. Dairy Forage Research Center (Dhiman and Satter, 1997) assessed lactation performance of dairy cows fed different proportions of alfalfa silage and corn silage. Forty-five mature and 29 first-lactation Holstein cows were used in a full-lactation trial. Cows were fed diets with a 50:50 forage to concentrate ratio. The forage DM in the diet contained either all alfalfa silage (AS), 2/3rd alfalfa silage:1/3rd corn silage (1/3 CS), or 1/3rd alfalfa silage:2/3rd corn silage (2/3rd CS). The silages used in the trial were of good quality averaging 40% DM-19.5% CP-40% NDF and 36% DM-8% CP-45% NDF for the alfalfa silage and corn silage, respectively. Diets were formulated to equal concentrations of UIP (% of DM) and energy (Mcal NEI per lb. DM) by varying the proportions of high-moisture corn, soybean meal, roasted soybeans, and tallow. Trial results are presented in Table 2.

Table 2. Lactation performance of dairy cows fed different proportions of alfalfa and corn silage.

Item	AS	1/3 rd CS	2/3 rd CS	(P<)
DMI, lb/d	46	47	46	NS
DMI, % BW	3.51	3.75	3.57	.05
Milk, lb/d	68	71	69	NS
FCM, lb/d	68	72	70	.15
Fat, %	3.53	3.67	3.65	NS
CP, %	3.08	3.15	3.19	.08
<u>305-d Milk, lb</u>				
Mature	21,105	22,374	22,053	NS
1 st -Lactation	17,873	18,506	17,970	NS

Lactation performance was good for all diets, but there was a slight advantage for the 1/3rd corn silage diet. There appears to be reasonable flexibility between 1/3rd and 2/3rd of the forage DM as corn silage for animal performance. Forage inventory, crop rotation, risk management, and feed cost considerations largely determine what proportion of corn silage to feed within this range. An upper feeding limit of 2/3rd -3/4th of the forage DM as corn silage is recommended, because of its high moisture, acidity, starch, and energy content and low effective fiber content (Refer to Table 1). Manure nutrient management, risk management, and feed cost considerations also factor into this recommendation.

BALANCING CORN SILAGE BASED RATIIONS

Suggested ration changes when switching from a low to a high proportion of forage DM as good quality corn silage are as follows:

- More protein supplement needed to meet requirements
- Protein supplement can contain less UIP
- Less corn supplemented to meet energy and fiber requirements
- Byproduct fiber sources may be needed to control ration starch levels
- Target 35% vs. 40% NFC to maintain good rumen pH and fiber digestion
- Less fat supplement may be needed to meet energy requirements and for conditioning
- More of the fat may need to be in rumen-inert form to minimize milk fat test problems
- Hay may be needed to provide adequate effective fiber, particularly for transition cows
- More cow groups may be needed to prevent over-conditioning of late lactation cows
- More supplemental Ca, Mg, K, and S will be needed to meet requirements
- More dietary buffer may be needed to maintain good rumen pH and fiber digestion.

REFERENCES

Dhiman, T. R., and L. D. Satter. 1997. Yield responses of dairy cows fed different proportions of alfalfa silage and corn silage. *J. Dairy Sci.* 80:2069-2082.

Jerry Jargon

Jerry Clark

Chippewa County Soil & Crops Educator



DIAGNOSING LATE SEASON SOYBEAN DISEASES

A lot is happening in soybean fields this time of year, and now is a good time to learn about several common diseases. If you just drive by your soybean fields this time of year, you could easily mistake maturity and natural plant death for several diseases or, possibly, early senescence due to drought.

Phytophthora root rot: (i) infected plants are often easy to pull from the ground due to the root rot during the early infection, (ii) stem lesions are the key diagnostic symptom later in the season and include a brown discoloration that progresses 6 to 12 inches from the soil line, (iii) diseased roots are smaller than healthy plants, and the taproot and lower stem are internally discolored, and (iv) this can lead to an open area of the canopy.

Soybean stem canker symptoms: (i) first appear during early reproductive stages as reddish-brown lesions at the base of branches or petioles and are first noted after the petiole has dropped, (ii) as the lesion elongates, it will become dark brown to black, forming a canker that is sunken in appearance, and the stem often becomes girdled, (iii) foliar symptoms can include an interveinal chlorosis and necrosis due to the production of a toxin, (iv) above and below the site of the canker, the tissue remains green and, while the leaves may wither, they will remain attached, and (v) unlike Phytophthora, stem canker does not cause a root rot, and this will also differentiate stem canker from diseases like sudden death syndrome.

Symptoms of white mold usually first occur in the early reproductive stages and are characterized by a white mold found around the lower part of the stem along with sclerotia (black fruiting body) in the pith of the stem and on the stem and branches. Severe infections can lead to wilting and death of the upper leaves. Plants that have white mold have differing degrees of pod development, thus reducing yield.

Variety selection, tillage and row spacing are all very important in protecting against these diseases. Without walking through your fields and examining individual plants, these three diseases could be easily misdiagnosed.

Natural, disease-free senescence of your soybean crop will begin with yellowing of leaves, followed by yellowing of the pods and leaf drop. Careful inspection of these yellowing leaves and examination of the inner stem tissue can confirm whether Brown Stem Rot or Sudden Death Syndrome is also present. Based on our observations in 2008, we have seen an increase in BSR symptoms late in the growing season, and these have required careful inspection and splitting of stems. BSR and SDS leaf symptoms are very, very similar. Cutting open the taproot and lower stem of a plant with SDS will reveal a brown or gray outer stem and center pith that is white. The stem pith of a plant with BSR will be brown, with browning more prevalent at the nodes. Careful examination of the stem interior is the one way to confirm which disease is present in the field.

SDS is a fairly new disease in Wisconsin. It was confirmed in nine counties in 2006 and was seen with increased frequency in 2007. In current surveys of soybean fields in 2008, the level of SDS has not been nearly as high as in 2007; however, it is still important to not just assume that means you have BSR and split stems to verify if the disease you are seeing is SDS or BSR. UW research is finding more evidence of a link between SDS and soybean cyst nematode (SCN). In most cases where SDS is found, SCN is present as well. If you find SDS in the fields you scout, be sure to pull a soil sample for SCN.

Taking a little time this fall to walk soybean fields, pull a few plants, split the stems and examine the leaves will help you correctly identify any diseases and will help to make decisions about how to manage them next year.

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