



Trempealeau County Agricultural News

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Veterinarian Feed Directive

How we use antibiotics in livestock production is changing. Starting January 1, 2017, you will no longer be able to use antibiotics in livestock feed to enhance animal performance. You will still be able to use antibiotics to prevent illness, control illness, and to treat illness.

You will need a prescription from a licensed veterinarian on file at the feed store before you can purchase antibiotics to put in animal feed. The prescription is called a veterinarian feed directive (VFD). You also need the prescription before the feed mill can grind and mix a complete feed for you containing an antibiotic. You will also need to have a valid veterinarian/client/patient relationship (VCPR). VCPR means the vet has been on your farm and is familiar with your operation and livestock. A VCPR can help you keep animals healthy without using antibiotics by providing insight into how or why things should be done a certain way. Vaccinations and bio-security can also help avoid the use of antibiotics in livestock production.

Don't wait until you have sick animals and then try to get a medicated feed at the local mill. Veterinarians will be busy with current clients. Purchasing a pallet of medications in late December will not work either; you need the VFD to feed the product after January 1. If you do not have a valid VCPR and a valid VFD, get one sooner rather than later.

Ionophores such as Rumensin®, Monensin®, Lasolocid®, and Corrid® are all exempt from the VFD requirements.

For more information on VFD please use the following links. The YouTube video is very informative.

The first episode of the podcast series on the new Veterinary Feed Directive changes is now available. Special thanks to Sarah Mills-Lloyd for being the guest speaker. Please feel free to share with anyone you would like.

YouTube video link:

https://www.youtube.com/watch?v=EVkdL4TUx_A

Website link: <http://fyi.uwex.edu/agpodcasts/2016/12/06/veterinary-feed-directive-part-1-the-basics-responsibilities-and-drugs/>

CALF MANAGEMENT

Thursday, February 16th
Blair Community Center (Blair Fire Station)

Meetings: 1-3pm (lunch at 12:30)

Registration Fee: None, reservation appreciated for lunch count.

For more information:
Trempealeau County UW-Extension
715-538-2311 ext. 208

Measuring adenosine triphosphate (ATP) is a common method food processors, and health care industries are using to measure the effectiveness of their cleaning procedures. An ATP meter measures organic material present on surfaces which otherwise appear to be clean to the naked eye. Dr. Don Sockett, DVM with the Wisconsin Veterinary Diagnostic Laboratory has been working to adapt ATP usage to on-farm calf sanitation audits. ATP measurements may have value for farms' calf management, by identifying areas where cleanliness can be improved. By utilizing this technology farmers are able to assess how they are doing at sanitizing the equipment they use for calf management.

The focus of this meeting will be to learn how the ATP meter can be used to evaluate farmers' current protocols for washing calf care equipment and the ability to thoroughly clean that equipment. Data will be presented from UW-Extension studies of dairy farms' level of organic material on equipment with the ATP meter before and after improvements were made to cleaning protocols. Following the program, participants will have the opportunity to use the ATP meter on their farms. Dairy owners/managers are welcome.

Soil Fertility Strategies for Lean Times

I know what you're thinking, here goes another expert telling me how to cut costs because prices are low. First, thank you for considering me an expert, I guess. Second, don't stop reading yet, it gets better. Following is a top ten list of soil fertility strategies based on an outline by Carrie Laboski, UW-Madison.

10. Base all soil fertility decisions on a recent soil test. A recent soil test is four years old or less. Soil testing does not have to be done using GPS to be effective so if you are thinking you can't afford to soil test look at cutting out the GPS service and do it yourself to save money. The rule is one composite sample for each five acres. A composite sample is one bag with five to ten cores per bag. The cost for routine soil sampling breaks down as follows:

$$\text{\$8/sample} + \text{\$4 for collection} = \text{\$12/sample}, \text{\$12/5 acres/4 years} = \text{\$.60/acre/year}$$

If you take the samples yourself, you can save the \$4 for collection.

Use a state certified soil testing lab. The nutrient tests are calibrated for our soils and climate and backed with research to calculate the likely response at a given soil test level. Using a lab from another state or a company lab calls into question the results. Are the results calibrated to Wisconsin or calibrated to sales of fertilizer?

9. Lime! Corner stone of any fertility program. Nutrients are most available at a pH of 6 to 7.5. Lime to the most pH sensitive crop in your rotation. If alfalfa is in your rotation, your target pH should be 6.8 to 7. Soybeans require 6.3, corn is 6 or higher. Dolomitic lime is ok and there is no advantage to using high calcium lime. Do not substitute high priced pelletized lime for Ag lime. The sales pitch that finely ground, pelletized lime is more effective than 80-89 grade lime is simply not true, don't fall for it! Calcium carbonate is what neutralizes the hydrogen ions that are making your soil acid. Pell lime does not have more calcium carbonate than regular lime. Gypsum does not alter pH.

8. Be sure to follow the 4 Rs of nutrient stewardship; right source, right rate, right time, right place. Base nutrient needs off current soil test information. Use the most economical form of a nutrient. Plants do not care if you spend more for a given nutrient because it was a poly-what-ever source. There are a lot of additives out there that are supposed to make fertilizers more available or prevent tie up. They don't work as good as advertised. Don't spend the money on them!

7. Use the Maximum Return to Nitrogen calculator (MRTN) to get the corn nitrogen rate for your soils. MRTN is backed by decades of research on Mid-West soils so the results are very accurate. MRTN is based on economics and the probability of reaching a certain yield point. Remember, when applying nutrients, the largest response is from the first few pounds of the nutrient and the response drops with each additional unit of a nutrient. MRTN can be accessed at the following web address; http://corn.agronomy.wisc.edu/Management/pdfs/L025_N_card_extended.pdf. Remember to subtract from the MRTN rate any nitrogen credit from forage legumes and manure applied to the field.

6. Cut back on P & K applications. Always fertilize per a soil test! If you are short on money, probability of response to phosphorus (P) is quite low. While P is needed for many vital plant functions, P is reused in the plants because many of the functions use P as a catalyst so P is reused many times. Soils testing in the optimum to high level in P will not show a response to P in corn starter. Starter does not warm cold soils. Early growth in corn comes from the seed itself and plants do not begin to take up nutrients from the soil until corn is at the one to two true leaf stage of growth. Remember, the first leaf that emerges is not considered a true leaf. Starter gives more of a yield response on late planted corn because the soil is warm, growth is rapid, and the nutrients in the starter allow for rapid growth so the corn will grow rapidly and never stall out. Using a starter with late planted corn helps the corn reach maturity with lower

moisture at harvest. In early planted corn the limiting factor is air and soil temperature, not nutrient levels. Potassium (K) will give a larger yield response than P so spend limited dollars to get adequate K for your crop before you spend money on P.

5. Skip starter fertilizer if soil tests are at the optimum level or higher for P. Applying starter on the seed as a pop up does not increase the chances of a response to starter. Applying popup increases the chances of injury to the seed and thinning of the stand so I don't recommend the practice. Corn does not begin to use many nutrients from the soil until the radicle, or first root, is three to four inches long. At this length, the standard two by two placement is adequate and poses less risk of seedling injury and stand reduction.

4. Consider sulfur (S) for corn if you had an issue in the past or you are farming low organic matter (OM), sandy soils. Manure can provide more than enough sulfur for a corn crop so if your fields receive manure for the current crop or one year prior to this year's crop don't add more sulfur. Added sulfur won't hurt the crop, just your pocket. If you use gypsum, keep the rate low. Gypsum is 18% sulfur and 150 bushels of corn grain removes nine pounds of sulfur. For more information on gypsum, use the following source: <http://ipcm.wisc.edu/blog/2011/03/applying-gypsum-to-wisconsin-soils/>. Other sources of sulfur are just as good as gypsum and should be considered based on price per pound of sulfur.

3. Micronutrients are often not deficient in Wisconsin crops. Don't be tempted by tantalizing micro packs being pushed by fertilizer dealers. The sales pitch of "While we're applying your post emerge herbicide we can put in this magic micro pack for only \$5 or \$10 per acre," sounds great but each added dollar needs to return at least a dollar, preferably more. It may be convenient for the dealer but losing money should never be convenient for you. Corn and soybean are very seldom deficient in micro nutrients in Wisconsin, even high yield potential crops. Don't fall for the sales pitch! Only \$5 or \$10 multiplied across your acres is real money. Independent, replicated yield trials do not show a response to micros; no crop response equals no return on investment. If there is no return on investment, don't spend the money! Corn is never deficient in boron! The only crop that shows a response to boron in Wisconsin is alfalfa grown on sandy soils and that is only one pound of added boron per acre annually.

2. Manure doesn't just smell good, its loaded with nutrients. CREDIT WHAT YOU SPREAD. The nutrient content of manure is real and proven effective with decades of research at numerous mid-west universities. There is no reason not to credit the number of nutrients applied. Winter spread, solid dairy manure contains 3-3-8 and is backed up by research and my personal observations. Take credit for it!

1. Ignore industry tissue testing programs that are used as marketing strategy. Tissue testing does not have to be state certified. Soil test micros do not have to be state certified. State certification is important because the certification process lays out standard testing methods and laboratory procedures that are backed up with research for Wisconsin conditions. Soil testing for micro nutrients is not a recommended practice in Wisconsin for many reasons. Tissue testing is calibrated to specific crop growth stages and sampling outside of that specific growth stage will result in errors. Tissue tests are based off sufficiency ranges for a specific growth stage for each crop. Sufficiency ranges will change as the crop moves through growth stages because the plants will mobilize and store nutrients differently depending on the growth stage the plant is in at the time. The correct growth stage for tissue sampling in soybean is R1. The R1 growth stage in soybean occurs at the initiation of flowering and occurs at the end of June or first week of July. If you are presented with plant nutrient deficiencies diagnosed from a tissue test that was taken late July or August in soybean, don't believe it and certainly don't apply nutrients based on this test. Tissue tests taken outside of the targeted growth stage are not accurate. Plant tissue tests should be used to diagnose poor areas of a field as compared to good areas of a field and should not be used as a blanket sampling program to fine tune management. Tissue sampling has never been intended as a blanket sampling system as we use soil sampling. Do not believe company sponsored tissue testing and micro nutrient testing programs.

No-Till Corn Nitrogen Management

Tillage for corn that is following soybean does not result in enough yield to pay for the tillage. In other words, no-till corn is more profitable following soybean than performing tillage to plant corn. So how do you apply nitrogen? You could use anhydrous ammonia and leave the injection marks if the small trenches don't interfere with planting or lead to erosion from water channeling in the tracks. If that is not a good option, look at using urea with a urease inhibitor such as NBPT and surface apply the urea. Using a urease inhibitor will gain seven to fourteen days before nitrogen losses will occur. Nitrogen loss from surface applied urea varies greatly depending on the weather at the time of application and after application. A urease inhibitor acts on the urease enzyme, slowing the conversion of urea to ammonia, reducing the amount of nitrogen lost, and buying some time until rain can move the nitrogen into the soil.

The conditions that set up ammonia loss from surface applied urea are high soil pH, surface residue coverage, and lack of rain or irrigation in the first few days after application. Four tenths of an inch of rain or irrigation are required to move the urea into the soil and protect it from volatilization. Once urea is dissolved in water, the urease enzyme begins converting the urea to ammonia. If the urea is below the soil surface, the ammonia is held by the cation exchange capacity of the soil and is available for crop use. If the urea is on the soil surface, ammonia volatilization can occur. Nitrogen loss from surface applied urea can range from no loss to 50%. If rain is expected within three days of application, a urease inhibitor will not provide an economic or agronomic advantage.

Using a urease inhibitor with 28% nitrogen does not provide a benefit. Remember, 28% is urea ammonium nitrate, or UAN. The nitrate portion will not volatilize and only 50% of the urea is subject to volatilization so not enough nitrogen is subject to loss to pay for the urease inhibitor. The ammonia portion could volatilize from the surface. Using an ammonification inhibitor such as N-serve® with 28% does not pay for the same reason that using the urease inhibitor does not pay. Not enough of the nitrogen is in the ammonia form. Ammonification inhibitors must be incorporated or injected into the soil to be effective. Ammonification inhibitors work by slowing the process of changing the ammonia to nitrate. The nitrate is subject to leaching or conversion to nitrogen gas, depending on soil conditions. Using 28% is an option for no-till corn planted into soybean stubble.

ESN or other encapsulation products are options that need to be looked at and considered.

Be sure to work through the numbers concerning what nitrogen source to use. Compare the cost of anhydrous, urea with an inhibitor or encapsulation, and 28% plus the cost of application and tillage that may be needed to incorporate product or close the injection marks. Any tillage following soybean will cover most of the residue and will leave soils open to erosion. If other nutrients are needed, you could end up paying for two applications if dry potassium and 28% or anhydrous is used. If potassium is needed, including urea in one application is an easy call. Look at all options and pick the one that fits your operation and reduces the risk of erosion. Erosion equals lost nutrients and productivity as clay and organic matter are the soil fractions lost to erosion, so don't ignore erosion.

Dairy Newsletter

Enclosed is a copy of the El Companero/Dairy Partner newsletter. Please read this and share it with your Hispanic employees.

This newsletter has informative topics and seasonal items that can help you manage your dairy and your farm workers.

Topics throughout the year include dairy herd health, proper dressing for cold weather and winter driving just to name a few.

Trempealeau County

2017 Pesticide Applicator Training

Choose one of the two dates listed below, **space is limited**. There is a \$40.00 fee for the Training Manual. Once you have registered, the necessary training manual may be obtained from the following locations below:



- Trempealeau County UW-Extension Office
- Centerville Coop

OR

You can have the manual mailed to you. You will need to send in your registration form and a check for \$45.00, then you will receive your manual in the mail. Manuals will **NOT** be mailed one week before the training date.

Please make checks payable to the UW Extension Office

Wednesday, January 25th
10am to 3pm
Trempealeau County Courthouse
TremplO Room
Feel free to bring a sack lunch

OR

Wednesday, February 15th
10am to 3pm
Trempealeau County Courthouse
TremplO Room
Feel free to bring a sack lunch

Pesticide Applicator Training Registration Form

Program Material fee is \$40.00 (mailing \$45.00)

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Daytime Phone number: _____

I plan on attending the training on: (please circle one date below)

Wednesday, January 25th

Wednesday, February 15th

I would like to have my training manual mailed to me for an additional \$5.00

(Please note that training manuals will **NOT** be mailed out one week before the training date, due to the delay in the postal delivery.

PLEASE register **(SPACE IS LIMITED)** by mail or phone at:
715-538-2311 ext. 208 at least one week prior to training

Mail your registration form and payment to:
Trempealeau County UW-Extension

PO Box 67
Whitehall, WI 54773

COME JOIN US.....

For questions or to register for any programs outlined here, please call the Extension Office at 715-538-2311 ext. 208 or email michelle.rose@ces.uwex.edu

January 6th - **Agronomy Update**—Clarion Hotel Eau Claire

January 13th, **Winter Farmer Forum: Cover Crops, Soil Health and Nitrogen** - registration 9 am, meeting 9:30am-3:45pm SS Peter & Paul Church Hall, Independence. Dr. Heather Darby, Cover Crops, Mark Gutierrez, Cover Crops & Insurance, Dr. Francisco Arriaga, Soil Health, Kevan Klingberg, Nitrogen, Steve Okonek

January 16th - **Farm HRM** hiring and retaining employees 1-3pm BRF

January 19th - **Melrose Grain Marketing group** 11-2pm

January 24th **Jackson County Pesticide Applicator Training**, Black River Falls

January 25th **Trempealeau County Pesticide Applicator** Tremple Room Courthouse, Whitehall

January 26th - **Estate planning** – Bridget Finke, Attorney, Bakke Norman Law Offices 1:00 – 3:00 p.m.

February 7th - **Melrose Grain Marketing group** 11-2pm Melrose

February 9th **Crop Scouting**, registration 10am, meeting 10:30-2:30 - Western Wisconsin Technical College, Independence. Dr. Bryan Jensen, UW Entomologist will discuss insect pests of crops. Dr. Damon Smith, UW Plant Pathologist will discuss plant diseases. Steve Okonek, Trempealeau County Agriculture Agent will discuss scouting techniques.

February 13th - **Farm HRM** motivating employees 1-3pm BRF

February 15th - **Trempealeau County Pesticide Applicator Training**, Tremple Room Courthouse, Whitehall

February 16th - **Dairy Calf Management** 1-3pm, location to be determined, Dairy calf hygiene and the latest in dairy calf management will be discussed.

February 21st - **Jackson County Pesticide Applicator Training**, Black River Falls

February 23rd – **Long Term Care: Planning for My Future Needs** – Steve Shapiro, Medigap Insurance Specialist, State of Wisconsin Board on Aging and Long Term Care and the Wisconsin Office of the Commissioner of Insurance 1:00 – 3:00 pm

Please note there will only be two pesticide applicator training sessions this year, down from three in previous years. If you need to re-certify this year, please register soon as seating is limited to the first 35 people for each session

Hope to see you there!

THANK YOU!

This Trempealeau County Extension Newsletter is sponsored by these Trempealeau County Community Agricultural Banks:



Alliance Bank: 715-597-2626
Bank of Galesville: 608-582-2233
Independence State Bank: 715-985-3197
Pigeon Falls State Bank: 715-983-2295
State Bank of Arcadia: 608-323-3331
Union Bank of Blair: 608-989-2541
United Bank: 715-597-3136
Waumandee State Bank: 608-323-3555

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This will help us with printing and mailing expenses**