Extension
UNIVERSITY OF WISCONSIN-MADISON
MARINETTE COUNTY

Courthouse
1926 Hall Avenue
Marinette, WI 54143
Phone: 715-732-7510

If you will need any type of accommodation or assistance as you attend any Extension sponsored event, please contact the host county or Scott at the Marinette County office at least two days prior to the event. All requests will be confidential.

Scott Reuss
715-732-7510
1-877-884-4408
cell 715-701-0966
scott.reuss@wisc.edu

May, 2023 Newsletter

We are in that exciting and stressful time of the year that combines planting season with manure season with harvest season, as first-crop alfalfa harvest nears very quickly. This edition is focused on final planting decision making, getting ready for first crop harvest, and a few other facets.

Especially on those farms facing moist planting conditions, please try to take the extra few moments to stay safe on the roadways and in the fields. We have seen too many car/equipment accidents in our region in recent years and it seems like drivers are getting less and less attentive to what is going on around them. We need to do what we can to keep ourselves and other safe while on the roadways.

Please consider getting me your email address and cell phone number, so that I can add you to electronic notification systems that I will be developing more fully in the near future. Send me a text or email and feel free to send me contact info for others from your farm, as well.

Scott Reuss

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Upcoming Events

May 17	First crop monitoring project begins - likely abbreviated route due to immature forages.
May 23	First crop monitoring project full route
May 24	Organic Cereals Field Day (page 8)
May 26/27	First crop monitoring project full route
last week of May	watch for a text from GBWS regarding harvest date of winter triticale nitrogen rate forage plots and discussion
May 30	First crop monitoring project
June 2	8 am Reuss on WOCO Let's Talk First crop monitoring project
June 11	Oconto Cty. Breakfast on the Farm
June 25	Marinette County Breakfast on the Farm Shawano County Brunch on the Farm
July 19	Winter Wheat Field Day - Abrams area

Please watch for news releases or electronic updates for local programs, or contact me to find out precise topics and details.

First-crop Forage Quality & Pest Monitoring, the 'Scissors Clip' Project for 2023

If you have 'typical' alfalfa fields for your region, please consider contacting Scott Reuss, 715-701-0966 (call/text) or email scott.reuss@wisc.edu with the field locations so that he can walk them as part of this quality and pest monitoring effort.

We expect first crop to normally yield about 40-45% of overall tonnage, so it is very important to harvest at appropriate forage quality for your operation. There are also various insects and diseases that can change your harvest plans. Extension is assisting in the process of producer decision-making again this year by conducting region-wide forage quality and pest monitoring. Regional Crops/Soils Educator Scott Reuss will be walking alfalfa fields located throughout the four-county region on May 17, May 23, May 26/27, May 30, and possibly June 2 and later if maturity is later than normal. Conditions may mean abbreviated circuits on the early or later dates, due to being either significantly early or getting past prime harvest.

Some considerations for your planning & scheduling thought processes:

+ A normally expected RFQ (Relative Forage Quality) drop per day would be about four or five points. Warm, sunny weather will accelerate maturation, causing RFQ to drop more quickly, as much as 8 or 9 pts/day.

+ Harvesting causes at least a 10% quality loss. Thus, cutting at 200 leads to 180 in the bunker. You also need to account for daily drops in quality and begin early.

++ What quality do you really need and which fields can achieve different goals most efficiently?

Grassy or weedy fields will have lower RFQ values than will pure alfalfa stands, usually by about 10-15%. If you only need dairy forage, start with grassy/weedy fields and then go to the pure alfalfa stands. If you need a mix of forages, you'll increase your efficiency by switching them around.

+ Red clover and low lignin alfalfa hold their feed value longer.

++ Weigh the trade-offs for your operation. Every day you wait to cut, you lose quality, but gain quantity. Decide which is most important for your operation and plan accordingly.

+++ Be ready to go with any post-harvest treatments, such as fertilization or manure spreading. You really need to get any post-harvest driving on those stands done as fast as possible, so that you minimize the wheel damage, preferably getting everything done within four days of cutting. This is particularly important if you have lower fall dormancy alfalfa cultivars.

Height of Tallest Stem (from soil surface to stem tip)	Stage of Most Mature Stem: LATE VEGETATIVE	BUD STAGE	FLOWER STAGE
	Vegetative (>12") No buds visible	1 or more nodes with visible buds. No flowers visible	1 or more nodes with open flower(s)
-inches-	Relative Feed Value		
16	237	225	210
17	230	218	204
18	224	212	198
19	217	207	193
20	211	201	188
21	205	196	183
22	200	190	178
23	195	185	174
24	190	181	170
25	185	176	166
26	180	172	162
27	175	168	158
28	171	164	154
29	167	160	151
30	163	156	147
31	159	152	144
32	155	149	140
33	152	145	137
34	148	142	134
35	145	139	131
36	142	136	128
37	138	133	126
38	135	130	123
39	132	127	121
40	129	124	118
41	127	122	115
42	124	119	113

Where to get up-to-the-minute forage quality data:

Option #1. Conduct PEAQ (Predictive Estimated Alfalfa Quality) testing or collect forage samples in your own fields. Use the table here and collect values from across each field. If in doubt about the procedure, call Scott Reuss, 715-701-0966.

Option #2. Get local information by calling 715-732-7510 and listening to the message there, or find it on our local county Extension office web sites, or email me at scott.reuss@wisc.edu You can access both local and state-wide data by visiting the web site at: https://fyi.extension.wisc.edu/scissorsclip/ When on this website, make sure you select the right range of dates you want, and the region, counties, etc... It may take a small amount of trial and error to get the settings the way you prefer.

Use of Inoculant - Extension does recommend use of a Lactobacillus inoculant on first cutting because bacteria levels are naturally low on alfalfa grown under cool weather conditions. The value of added inoculant to chopped forage is increased when cool or outright cold weather occurs in days leading up to harvest. Use of inoculant has been shown to be most beneficial if the forage can be ensiled rapidly; forage left laying in the field for more than two days will likely not benefit from added inoculant. Also, benefit of inoculant use for baleage is doubtful due to inability to get good coverage as forage is being baled.

Alfalfa Stand Decision Making: Keep, Rotate, Supplement?

A few facts/thoughts to consider as you finish making decisions about alfalfa stands that did not fare as well overwinter as we would hope. There are definitely a few neighborhoods in our region that had winterkill areas in both younger and older alfalfa stands and they should either be rotated or supplemented. Every field, every year, should have a thought process applied to it so that the proper decisions are made regarding rotation. Here are a few of the basics to remember:

Stems/ sq. ft.	**Action needed?**
More than 55	Stem count NOT limiting yield.
40-55	Stem count MAY BE limiting yield.
Less than 40	Stem count DEFINITELY limiting yield

A more precise yield potential equation is:
yield (tons/ac) = (Stems/sq. ft. X 0.1) + 0.38

- Analyze stand density and consistency. Take stand counts in many different areas of the field and come up with a solid average. While doing that, pay attention to stand consistency, as that is another part of this decision-making process.
- Analyze your forage needs. How much forage do you need? Of what quality? When do you need it? The answers to these questions will help you decide the best actions to take from the following valid options.

- 40-55 stem count fields. The first question to ask yourself here is the consistency. If it is a consistent stand, your forage yield and quality will suffer less than if it is a spotty stand and there are likely no real good fill-in options that are worth the dollars and sense. If it is inconsistent, strongly consider filling in the dead spots (a common issue this year), or supplementing really thin stand areas. The best options for species in such situations will vary according to how long you want to keep the stand and a little bit according to whether you usually make haylage or hay.

If 2023 will be the last year of this stand, then best option is probably Italian ryegrass, as it has the fastest growth, is cheaper, and can be harvested multiple times. If you want to keep the stand longer, then consider perennial ryegrass, orchardgrass, festulolium, or some other perennial grass options. Haylage harvest gives you some legume options, including crimson or red clovers for this year only, or red clovers for multi-year hopes.

- **Less than 40 stem counts.** You need to turn the field over or supplement the stand.

If you need forage right away, the standard answer is to take first crop and then plant corn silage. BUT, this is the most costly of all your options. Really, truly think about if you are not better served to get the silage planted at the proper time - a very good Michigan State University study showed that most years, farms are better off financially to just kill these types of stands and plant corn silage right away and the rest of the time, they are better off to keep the poor stands - it hardly every works best to do first crop and then plant silage.

Supplement the stand. As per above, how long do you want to keep the stand? If it was a brand new stand last fall, you can re-plant alfalfa in the thin spots, other than that, planting alfalfa seed is a waste of time and money, due to its autotoxicity factors. A slightly unusual option to consider on these really thin stands is to no-till forage oats right into the stand and then harvest as appropriate for the oats. This then gives you a field for summer manure opportunities, another small grains forage crop, cover crop experiments, or winter wheat if that is an option for your rotation.

News, Notes, and Upcoming Opportunities

Tractor & Machinery Certification to be held in July Extension of our four counties is going to be offering the certification training in July. Course details are being finalized, yet, but will likely include some self-study and webinars, and either 2 or 3 in-person learning days. Cost of the certification is $45 per student, with in-person training sessions to be offered in two locations. If you have youth ages 12-16 on the farm, they need to be certified to drive tractors as part of work or on/across public roadways. Contact me at 715-701-0966 or send an e-mail to scott.reuss@wisc.edu to get course details.

Green Bay West Shores Demonstration Farm Network If you haven't added your phone number to the contact listing for the GBWS Farm Network, you can do so by texting **GBWSDemo to (920) 260-6200.** This is case sensitive, so make sure the words are capitalized like they appear here. If you can't get it to work, contact Matt Brugger at 920-470-3889. The Demo Farm Network will be sponsoring field days, 'flash' in-field events, and will have occasional news they send out.

Nitrogen Management this year; If in doubt, cut rates down a bit. Make sure you have 80 to 100 lbs. actual N/acre of corn for grain, and 120-140 for silage and then go up from there according to your experiences with a given field. Crop Prices merit fertilizer usage at near normal levels, but cash flow should be a determinant for you, as well. See the results of last year's 5 nitrogen rate and biological products research to see why I say get 80-100 lbs/acre onto your grain fields.

* Now Hiring *

3 - Full-Time Program Technicians
Oconto-Marinette & Shawano-Menominee

Farm Service Agency- FSA

Farm Service Agency (FSA) is now seeking qualified candidates for permanent program technicians. The Farm Service Agency is an exciting and rewarding place to start, build and/or continue your professional career. Be a part of our team and support the well-being of Wisconsin agriculture by applying for a position today.

County office program technicians are responsible for carrying out office activities and functions pertaining to the technical assistance and program support related to USDA Farm Bill programs. Basic requirements include computer skills a must, general office clerical work, record keeping, organizational skills and good public relations skills. The selected applicant must undergo a background investigation.

The county office program technician positions offer benefits such as health insurance, 401(k) plan, paid holidays, vacation and sick leave and flexible work schedules. The full vacancy announcement (FSACO-11945106-23-WI-KW) can be obtained via USAJOBS at www.usajobs.gov. Applications deadline is May 25, 2023. To apply CAREFULLY follow instructions in the vacancy announcement. A recruitment incentive may be authorized for this position.

Interested applicants should reach out for additional information or help with the application process. Applying by grade is new to most persons, so please contact Nancy Swenty with any questions at (920) 829-5406 ext. 2 or Nancy.Swenty@usda.gov. ***This office is a Shared Management Operation between the Oconto-Marinette and Shawano-Menominee FSA offices. Location may be determined after selection.***

USDA is an equal opportunity provider, employer, and lender.

First Year Results: Testing Biological Products in grain corn across varying nitrogen rates

First, some acknowledgements about this project. We had very generous support from United Cooperative-Coleman and YieldMaster Solutions to be able to conduct this five-site study. Of course, the participating farms also provide a lot of support for the project by providing space and managing this plot as the rest of their field, except working around it with nitrogen applications. The farms which hosted these research plots in 2022 were Dudkiewicz Farms, Aaron Behnke, Strassburg Creek Dairy, Maly Farms, and Breitenmoser Dairy.

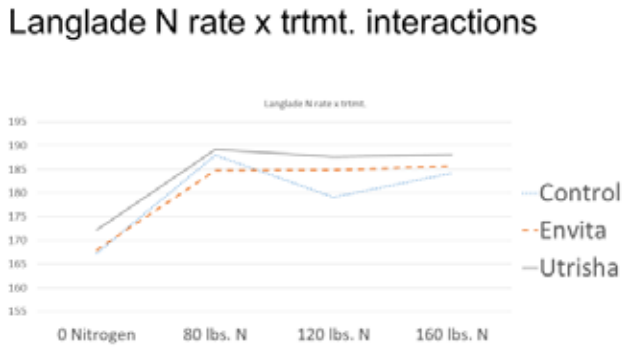
The protocol for this project was to utilize the host farm's management practices, except to apply nitrogen at rates of 0, 80, 120, and 160 lbs actual N/acre within the normal sidedress application window (generally V6). Blocks within each replicate were treated with the bacterial products Envita and Utrisha, applied via foliar spray at V4 growth stage and doing my best to meet the recommended environmental application conditions. Weed control was good in all five fields and none of the fields experienced significant disease pressure. However, growth conditions were definitely different across the five sites, as you can quickly see by looking at yield results. The Marinette and Shawano County sites experienced definite drought stress, and the Lincoln site was a later planted field due to excess early season moisture.

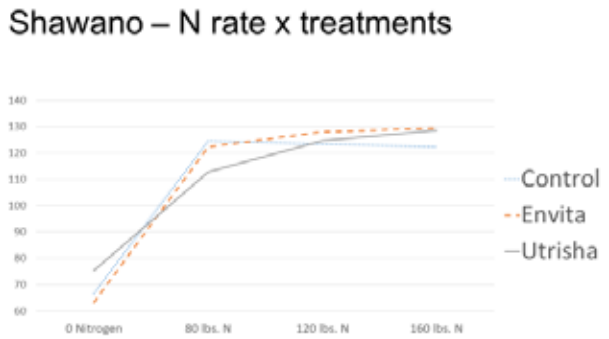
Results: The most significant results from 2022 were that 80 lbs of nitrogen yielded the highest economic return at most of the sites, especially if Envita treatment was included. Does this mean that we should all buy Envita, use it appropriately, and cut our nitrogen applications to about 80 lbs/acre and call it good? I'm not willing to say that, no. However, these findings do indicate that there may be merit to such an approach, particularly in years when the nitrogen to corn grain price is higher. After more years of study, maybe we will be able to find that interacting N rates and these types of products can yield likely positive economics.

Regarding the bacterial products themselves, we did see a positive yield response to using Envita at all five sites, but only two of the five sites had an economically positive response. Utrisha application resulted in positive yield response at 3 of the 5 sites, but also economically positive at 2 sites. Interestingly, Utrisha application lowered yield at the two most environmentally stressed sites.

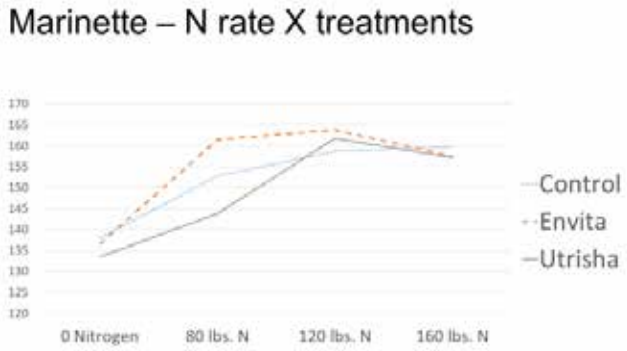
Main Treatments: Envita, Utrisha, Control
Yields averaged over Nitrogen Rates

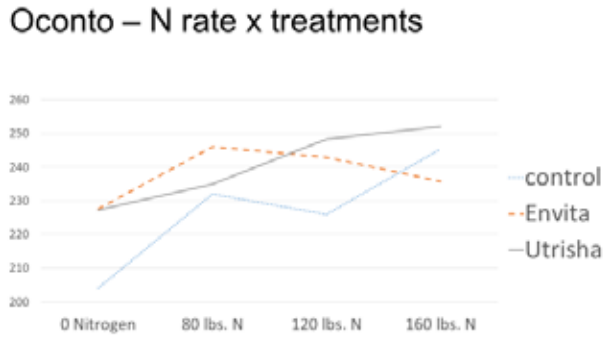
Site	Control	Envita	Utrisha
Langlade	179.7	180.9	184.3
Lincoln	160.3	162.1	156.5
Marinette	152.3	154.8	149.1
Oconto	225.6	238.1	240.7
Shawano	109.3	110.8	110.4



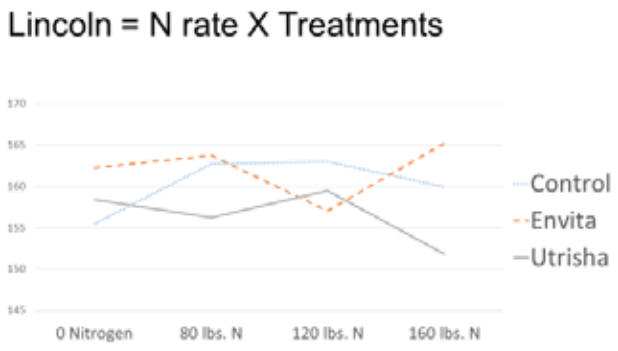


The Langlade and Shawano County sites had very similar graphic results, with the most significant yield response definitely being to 80 lbs N/acre, but with less consistent returns to Envita or Utrisha.





If you just look at the 'control' treatment within the Marinette and Oconto site graphs, you see increasing yield as we increased nitrogen rate. However, the highest economic return was still to the 80 lbs N/acre rate. Also at both sites, the addition of Envita created significantly higher economic returns at 80 lb N/acre, but decreasing returns (and actual yields) at higher N rates. With Utrisha, yield kept increasing through the 120 or 160 lbs N / acre rates, depending on site, and economic optimum did not occur until 120 lbs N/acre.



The Lincoln Cty. site did not respond much to increasing nitrogen rate, nor to application of these materials. Interestingly, the application conditions for the bacterial products were nearly perfect, but the corn was slightly more mature, i.e. V5 and V6.

These results definitely make me want to conduct more research on these products in our growing environments and see if we can focus in on when and what situations these products may give us the most likely positive economic return. If this is really interesting to you and you want to host a site, contact me right away, as I would be able to add one or two more sites to the project. We just need a portion of a corn field that hasn't had additional nitrogen applied yet.

2023 Planting Considerations as we move through the season

Some farms are going to be nearly done planting as you read this and others are just going to have gotten started, as there is a fair amount of soil moisture variability from location to location throughout our region. As we progress through the planting season, here are a few things to consider to be able to maximize economic returns to corn and soy.

Corn Planting date and maturity changes

We all know that every day that corn doesn't get planted, we are theoretically losing yield potential. In particular, after June 1, yield decrease due to delayed planting accelerates and really tanks after June 15 to 20, thus the reason for the planting dates in our crop insurance policies. However, as we move through the planting season, economic return to what we plant also changes, due to grain moisture impacts of immature grain and associated costs. Long-term research by UW Corn Agronomist Joe Lauer indicates that May 20 and June 3-5 are usually the 'switch dates' for corn hybrid relative maturity. As you go past these two switch dates, you will generally have better economic returns to your corn acres by dropping the relative maturity of the hybrids you are planting by 5 days RM. In other words, if you were planning to plant 95 day RM corn, you should plant 90 day RM corn between May 20 and June 2nd and plant 85 day RM corn hybrids if still planting after June 2nd. This assumes you are raising dry grain. If you are raising silage or High Moisture grain, then you are still well-served to maintain normally planned RM's.

Planting rate of corn should not change as we change planting date. However, the importance of proper planting depth and the use of starter fertilizer actually increase with later planting dates. So, make sure the seed is going into the ground at your planned depths and that you're putting on starter fertilizer in the realm of 10-10-20 as a 2x2 placement. Insurance ramifications also come into play. May 31st and June 5th are the final planting dates to have full coverage on your policies for grain and silage, respectively. Between these dates and June 25/30, you lose 1% of your coverage guarantee each day. Past June 25/30, you have only 55% coverage.

Soybean Planting date and maturity changes

Soybean recommendations change once, on about June 1. At that point, you should consider dropping the maturity of cultivars being planted by about 0.5 maturity groups. Also, you should consider increasing your planting rate slightly, especially if you were planning on planting less than 155,000 seeds/acre. Which, by the way, is a good idea for soybean planted on time, as economic optimum planting rate has been shown to be approximately 140,000.

Insurance changes for soybean take place on June 10. Until that date, you have full coverage. For each day of planting delay between June 10 and July 5, you lose 1% of your coverage guarantee. After July 5, your coverage goes to 60%.

Prevented Planting Options

If you have more than 20 acres or 20% of your insured acres that are not yet planted and you get to June 1 (corn) or June 20 (soybeans), you have the option to claim prevent plant on your insured crop acres. However, I recommend doing this only after consulting with your crop insurance agent, as there are potential yield history impacts for the future. Also, there are two different Prevent Plant Options – Full and Partial.

Full Prevent Plant yields you a 55% payment of insurance guarantee on corn acres and 60% on soybean acres. You can then plant cover crops on those acres and manage weeds, etc.. Recent changes also allow you to harvest forages from these acres at any time (graze, chop, hay). Further, you can establish alfalfa or other perennial forages for harvest in 2023.

Partial Prevent Plant is a different situation. You receive 35% of the Prevent Plant payment, or 19.25% of corn guarantee and 21% of soybean guarantee. However, you can still plant whatever crop you want and harvest as either grain or forage. One trick, though, is that if you switch corn acres to soybean and get the soybeans planted prior to June 20, you don't qualify for the Partial Prevent Plant payment.

If in doubt, discuss your options with your crop insurance agent!

Breakfast on the Farm Events

The counties in our region are conducting Breakfast/Brunch on the Farm events in 2023. Consider volunteering or donating, as they are one of the better ways to inform the non-farm public about the realities of agricultural production.

Oconto County Breakfast on the Farm @ Kohls Dairy Farm

Sunday, June 11th, serving from 8 am to 1 pm at the farm, 6214 Klaus Lake Road, Gillett
Organized by Oconto County Friends of Agriculture. Contact Jordan Rank, 920-598-0350

Marinette County Breakfast on the Farm @ Van De Walle Farms

Sunday, June 25th, serving from 7:30 am to Noon at the farm, W8303 W 22nd Road, Crivitz
Organized by Marinette County Dairy Promotions BOTF Cmte. Contact Corey Kuchta, 920-660-4182

Shawano County Brunch on the Farm @ Synergy Dairy (Jay & Heather Jauquet family)

Sunday, June 25th, serving from 8:30 am to 12:30 pm at the farm, W2285 Cty Rd S, Pulaski
Organized by Shawano County Farm Bureau. Contact shawanofarmbureau@gmail.com

Upcoming Opportunities

Organic Cereals Field Day @ West Madison Agriculture Research Station. Wednesday, May 24. Sponsored by Artisan Grain Collaborative and the UW Emerging Crops Program. Plot tours of wheat, barley, oats, and kernza with discussion of breeding work. Register at https://www.emergingcropswi.org/ and clicking on the events calendar and the notice there.

Also, if you are interested in learning more about other alternative crops, consider visiting https://cropsandsoils.extension.wisc.edu/emerging-crops-lunch-and-learn-series/ and view the videos from the series conducted this past year on a number of different crops that may work for farms in our region.

+ Wisconsin 2023 Soybean Yield Contest launched. Sponsored by WI Soybean Association. Winners per region, assigned by NASS County yield averages. Must have contest entry forms sent in by August 31st. Find forms and all information through WI Soybean Association or Coolbean.Info websites.

Winter Wheat Management Field Day – Hold the Date!

We are planning a great winter wheat field day event for Wednesday, July 19. It is going to be hosted by LeMere Farms just northeast of Abrams and will feature Dr.'s Shawn Conley and Damon Smith regarding winter wheat agronomic and disease management. On-site plots showcasing nitrogen rates, nitrogen application timing, sulfur rates, and fungicide demonstrations. Other activities expected to be added, so watch for more information as we get closer, but put the date on your calendar, as you will want to be there if you raise wheat or are thinking of adding it into your rotation.