NEWSLETTER

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Please contact your local extension office for the print version of any article included in this newsletter.

Here's your June Driftless Ag Update!

Hello and congratulations on receiving our June Driftless Ag Update!

This newsletter is co-written by your local UW-Madison Extension Ag Educators, Beth McIlquham (livestock) and Sam Bibby (crops).

Notes from your Regional Crops Educator- Sam Bibby

-Soybeans are looking great across most of the region. In a few weeks many folks will be making their final herbicide pass across these fields. Glufosinate (Liberty) is a great choice for those E3 or Extendflex beans. However, it is a tricky herbicide to use correctly. There are many more considerations for glufosinate than with a product like glyphosate (Roundup). We want to spray glufosinate when it is hot, sunny, and humid. We need to use AMS (not an AMS replacement product). We need to apply glufosinate with 15-20 gallons per acre carrier volume and get good coverage. Find all the best advice in this short video by Dr. Rodrigo Werle here.

-With higher fertilizer prices you may be wondering if selling winter wheat straw is worth the time. Thankfully my colleague Kevin Jarek has done some great work on this subject. He found that in his region (Eastern WI) 1 ton of straw DM (dry matter) is worth around $26.50 based on fertilizer prices for NPK alone. Latest auction results from around the state put straw prices around $120-$170/ton. Don't forget to figure raking, baling, and trucking expenses.

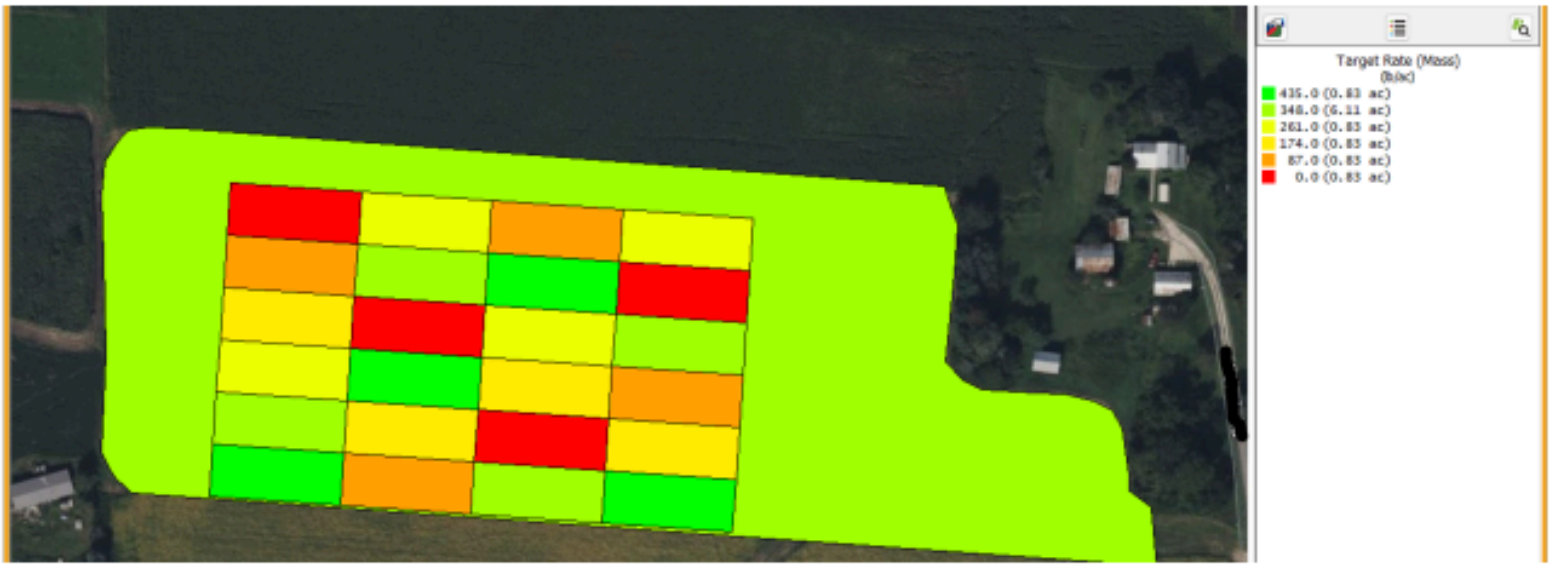
<u>Scouting reminders:</u>

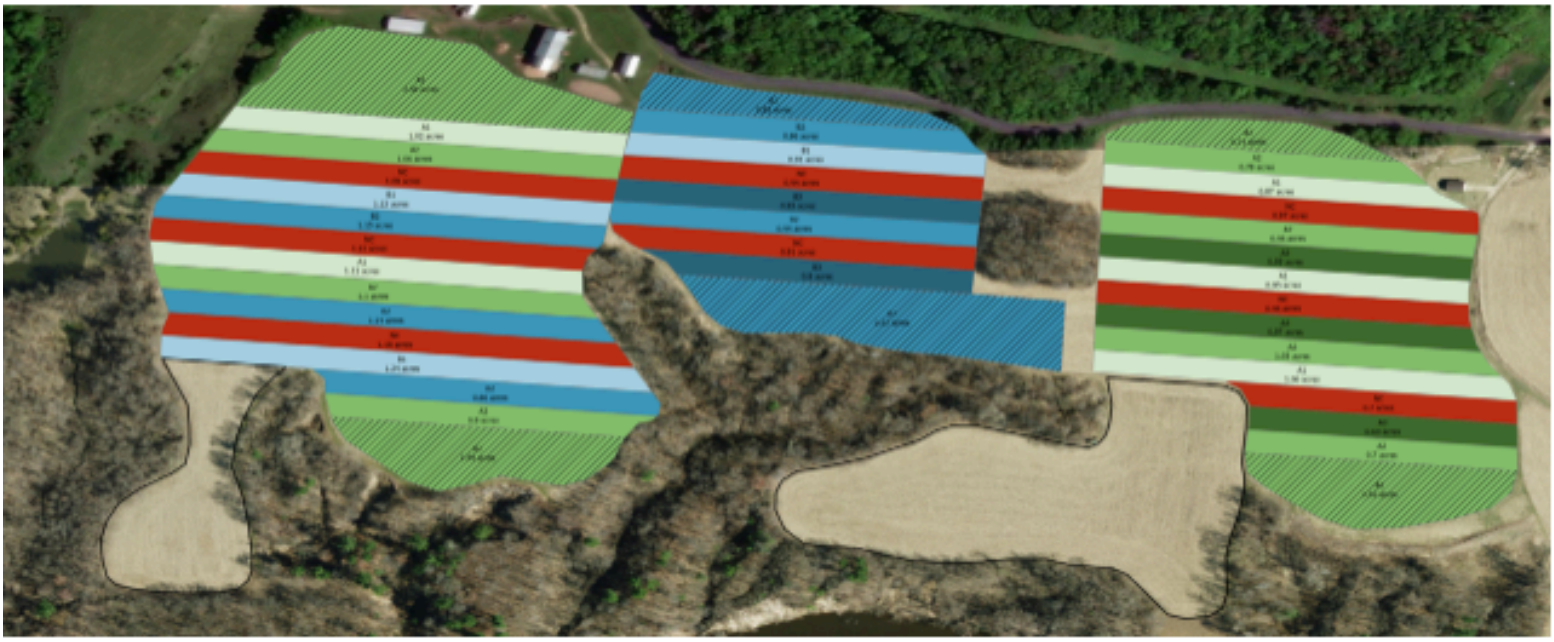
-V5 or the first half of June is typically the time we begin seeing true army worm damage in corn. Most Bt traits do not protect against army worm, only the Vip3A trait has shown protection, and it is not a widely adopted trait, so it is advised to scout all corn fields.

-As first crop alfalfa wraps up its important to remember to scout for alfalfa weevil on regrowth, especially in fields that had higher damage during first cut. As a general guideline, check regrowth 4-5 days after cutting, take a sweep net sample to confirm larvae are present, and collect or examine a total of 50 stems to assess feeding injury. The treatment threshold for regrowth is when 50% of stems show feeding and larvae are still active in the field.

What has Sam been up to:

I have been busy installing some on-farm research plots this spring. Some of these plots have been drawn and established with precision ag software. This has worked very well for doing high-impact low-effort on-farm research. If you are interested in trying something like this let me know. You don't need autosteer or GPS when co-ops and custom applicators have newer equipment.





Notes from your Regional Livestock Educator- Beth McIlquham

-Keeping Cattle Cool: Happy dairy month! Between beef month in May and dairy month in June, I am full of my favorite livestock agriculture products. Whether you raise animals that producer beef, dairy, or both, cattle of all kinds require management strategies to help keep them cool in the morning. Check out some tips on how to keep cattle cool and comfortable in summer.

-Disease Digest: To see HPAI updates in dairy herds in Wisconsin, check out the Extension Dairy webpage. To see HPAI updates in poultry flocks, visit the Extension Livestock webpage. There has been a case of New World Screwworm in the Texas in livestock. For more information, check out the USDA website. For information on Asian Longhorned Ticks, check out the recorded Beef Roundup Webinar session where Dr. Olds presented the latest information. For animal owners of all kinds, please evalutate your biosecurity protocols, including pest management.

Upcoming Events

Badger Crop Connect 2026

The Badger Crop Connect webinar series returns Thurs., April 9 at 12:30 p.m. and continues every second and fourth Thursday of the month through October. Tune in for research updates and timely topics for the Wisconsin farmer or agronomist. CCA CEUs available.

Register:
https://cropsandsoils.extension.wisc.edu/programs/badger-crop-connect/

Great River Graziers Pasture Walks

Join the Great River Graziers for some great pasture walks all summer. These pasture walks are great opportunities to network and learn what is/isn't working on neighboring farms.

See next page for details

GREAT RIVER GRAZIERS

EST. 1993

2026 Pasturewalks

All are welcome!
Facilitated by Vance Haugen (507) 459-0495
grg@crawfordstewardship.org
www.crawfordstewardship.org/grg
****check Facebook for schedule updates****

Tuesday May 12 10:30 am	Joe Childs Sparking Ln. Gays Mills, WI	Location is just outside Mt. Zion. Topic: watering cattle without a well or access to ponds. Joe's operation is a great example of "custom grazing" - where the grazier doesn't own the cattle or the land, but manages both for a head/day fee.
Tuesday May 26 10:30 am	Matthew Canter E7630 Rognstad Ridge Cashton, WI	Fertility with sawdust and manure compost. Timing of pasture moves to make the most of added fertility. The Canter family produces 100% grassfed organic milk.
Tuesday June 9 10:30 am	Andy Mullikin 53280 County Rd. N Wauzeka, WI	Transitioning to organic in the grassfed milk world.
Tuesday June 23 10:30 am	Ryan Studnicka 1435 Blue River Rd. Muscoda, WI	How to extend the grazing season. Stockpiling and limiting the amount of days spent feeding hay. **Note: This event also aims to bring together graziers in the Grant/Iowa County area to form a new pasturewalk group!
Tuesday July 21 10:30 am	Aaron Miller E8477 Octagon Ave. Cashton, WI	Managing the late spring flush and multi-species grazing.
***Saturday** August 29 10:30 am	Don Boland 18732 Hwy 27 Gays Mills, WI	One year review of switching to a once-a-day milking system.
Tuesday Sept. 15 10:30 am	Kelsey Vance E4998 Irish Ridge Rd. Viroqua, WI	Renovating pasture. Grazing under apple trees and multi-species grazing. We will also review what the fallowed corn field looks like after grazing for an entire season.
Tuesday Sept. 29 10:30 am	Jason Klinge 19769 Hwy 13 Farmersburg, IA	Matching stocking rates with forage growth throught the growing season. Managing Canadian Thistle by adjusting rest period.
Tuesday October 13 10:30 am	Christopher Baird 12241 Hwy 27 Ferryville, WI	Tillage considerations when establishing pasture in heavily outwintered areas. Reviewing nutrient management plan and soil samples. Increasing fertility over time with minimal commerical fertilizer

CRAWFORD STEWARDSHIP PROJECT

SAND COUNTY FOUNDATION

GrassWorks Inc.

NRCS Natural Resources Conservation Service

Soybean Yield and the 2026 "Super" El Niño: What Growers Need to Know

Authored by: Fabiano Colet, Spyridon Mourtzinis, Tatiane Severo Silva, and Shawn P. Conley

Introduction

While long-range weather forecasts are always a point of agricultural interest, the growing talk of a "Super" El Niño has taken center stage. This potential climate event is making headlines for its ability to trigger a season of extreme weather across the United States. The latest report, released on May 18, 2026, by the National Oceanic and Atmospheric Administration (NOAA) reported that El Niño is likely to emerge soon (an 82% chance during May-July 2026 and an 98% chance during August-October 2026) and will continue through the Northern Hemisphere winter of 2026-2027. Let's break down all this information in detail and discuss how that can affect your soybean fields.

What are El Niño and La Niña?

El Niño is a natural, large-scale climate phenomenon marked by warmer-than-average sea-surface temperatures across the central and east-central equatorial Pacific that triggers changes in atmospheric patterns. Differently, La Niña is the opposite of El Niño, characterized by the cooling of the equatorial Pacific sea-surface temperature.

Why can the 2026/27 El Niño become a "Super" or "Very Strong" one?

El Niño conditions develop once the sea surface temperatures rise over 0.5 degrees Celsius above average for an extended period. A "Super" or "Very Strong" phenomenon occurs when water temperatures climb more than 2 degrees Celsius above average. While it is still too early to say definitively whether we will experience a "Super" one, NOAA predicts a nearly 1-in-3 chance (~33% of probability) of a "Very Strong" El Niño, starting in the October-December 2026 period. In addition to that, globally, there is a high probability that this year will be one of the five warmest years on record, and that can be accentuated by the El Niño.

What are El Niño and La Niña?

No two El Niño events produce identical consequences, making local impacts somewhat unpredictable. Historically, El Niño events during summer and winter manifest differently in the Midwest:

- Summers: El Niño events are usually weaker and have a minor impact on Midwest rainfall and temperature patterns.
- Winters: El Niño typically peaks during this time, impacting the Midwest by producing warmer and drier conditions.

In years with La Niña events, the impact in the Midwest is the opposite during the winter, bringing colder and wetter (snowier) conditions

El Niño, La Niña, and Soybean Yields: What the Data Shows for Wisconsin

As the planting season progresses and

soybean plants emerge to put out their first leaves, farmers are asking, "How will El Niño impact my soybean yields?" The answer to that is not simple, as weather patterns remain unpredictable. However, we analyzed past El Niño, La Niña, and neutral climate events to check how soybean yields responded to these conditions in Wisconsin from 2008 to 2024.

Methods used for data analysis:

Data from the Wisconsin Soybean Variety Trials were analyzed for this study. For each trial location and year, the weather was matched by latitude and longitude, then summarized from planting date to harvest date. Each soybean year was assigned to an El Niño-Southern Oscillation (ENSO) phase (either El Niño, La Niña, or Neutral), using the Oceanic Niño Index, which tracks whether the tropical Pacific Ocean was cooler or warmer than normal.

El Niño and La Niña events were counted only when they lasted at least five overlapping 3-month seasons. For Wisconsin, the spring planting window was represented by March-April-May, while the critical summer reproductive period was represented by June-July-August. Based on these timelines, individual crop years were labeled as full-season, spring-impact, summer-impact, or neutral. Annual yield and weather data were averaged within each individual Wisconsin location first, and then aggregated across all locations to establish statewide averages. The accompanying error bars illustrate the variance among individual location averages within each year.

Let's discuss how these events have historically affected Wisconsin soybean production:

Wisconsin soybean yield, precipitation, temperature, and weather anomalies by ENSO phase in each year

- Yield averages generally increased in more recent years.
- Precipitation moved up and down much more from year to year.
- Temperature changed less than rainfall.
- ENSO phase alone does not explain soybean yield.
- Very dry seasons often lined up with lower yield, but several recent years had good yields even when rainfall was below normal.
- Overall, not only timing and amount of rain matter, but also crop management, genetic improvement, and soil conditions.

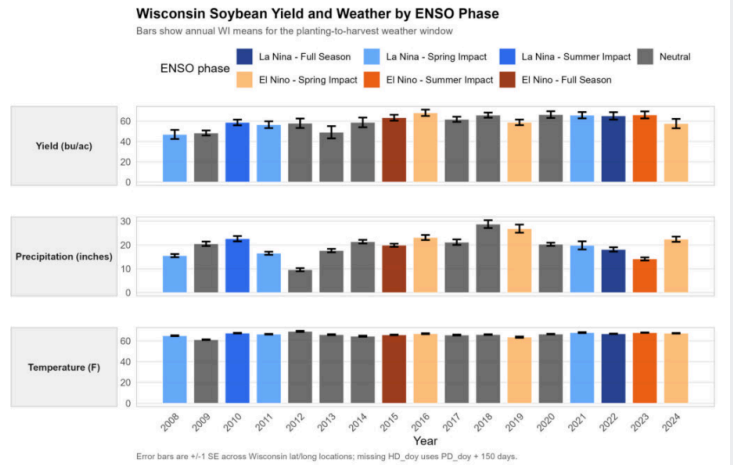


Figure 1. Wisconsin soybean yield (bu/acre) and weather (rainfall and temperature) by ENSO phase from 2008 to 2024.

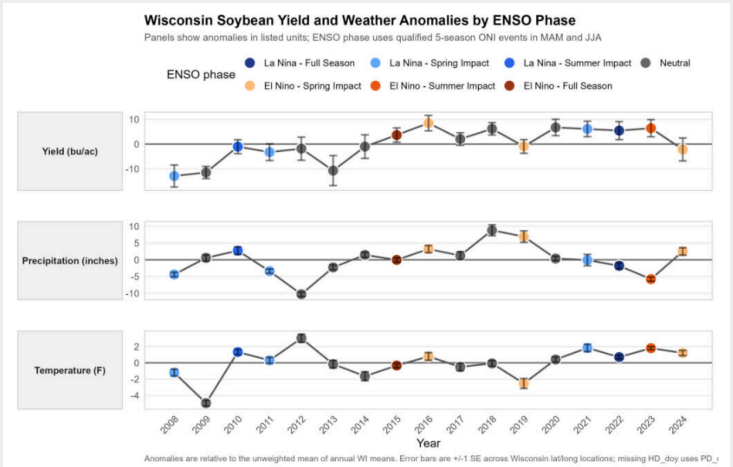


Figure 2. Wisconsin soybean yield difference (bu/acre) between the year-specific average and the 2008-2024 average, and weather (rainfall and temperature) anomalies by ENSO phase from 2008 to 2024.

Were Wisconsin locations wetter or drier than their own normal throughout the years?

- Locations in 2012 (Neutral), 2013 (Neutral), 2015 (El Niño), 2022 (La Niña), and 2023 (El Niño) were drier than normal.
- Locations in 2010 (La Niña), 2016 (El Niño), 2018 (Neutral), and 2019 (El Niño) were wetter than normal.
- This mixed pattern shows that La Niña or El Niño does not guarantee the same rainfall outcome every time in Wisconsin

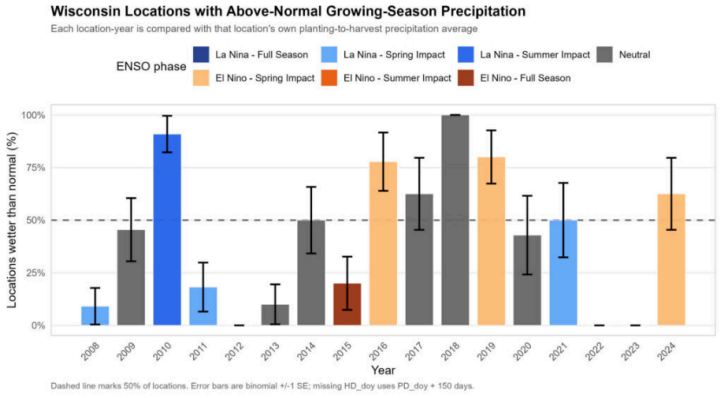


Figure 3. Wisconsin locations with above- or below-normal soybean growing season rainfall from 2008 to 2024.

Yield anomaly vs planting-to-harvest rainfall anomaly

While the driest years consistently produce low yields, peak productivity was not guaranteed by rainfall alone; rather, it emerged from the interaction between crop genetics, the local environment, and specific management practices.

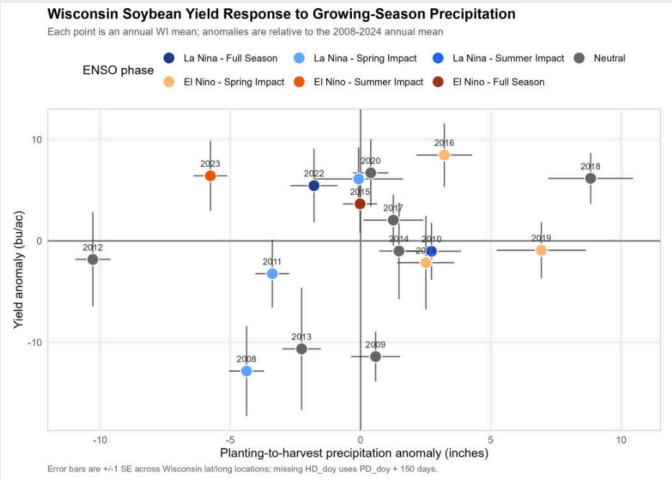


Figure 4. Wisconsin soybean yield response to planting-to-harvest precipitation anomaly from 2008 to 2024.

Anticipated field challenges

- Although there is no clear indication that El Niño will cause significant damage to the 2026 WI soybean crop, we are expecting that this will be one of the warmest growing seasons on record. With or without the presence of the Super El Niño, here are some anticipated challenges that farmers may face this year:
- Weed management: If we experience dry and hot temperatures both residual and contact herbicide efficacy may be decreased. There is also a potential increased risk for herbicide carryover.
- Shorter plants: Early-season heat and lack of moisture can result in shorter soybean plants with fewer nodes and reduced overall biomass. With shorter plants, canopy closure can be delayed or may not happen at all, complicating weed management.
- High temperature stressor: Extreme heat during the critical reproductive stages (R1 through R6) can lead to increased flower and pod abortion, and reduction of seed size.
- Insect pressure: Hot, dry weather is the perfect conditions for some pests, such as the two-spotted spider mite.
- Disease pressure: Use the CPN Crop Risk Assessment Tool to determine the risk for White Mold or Frog Eye Leaf Spot as in-season weather will drive the severity of these diseases.
- Lower soybean seed yield.

Management strategies

With soybeans already in the ground, growers are facing a difficult combination of high production costs and low market prices. Because a potential El Niño season introduces significant unpredictability, adopting proactive management strategies is essential to mitigating risk and protecting margins.

- Scouting: Step up field scouting schedules for weeds, insects, and diseases.
- Reduction of prophylactic inputs: evaluate the real need for any additional input you were planning to implement in your fields, including foliar fertilizers, foliar biostimulants, fungicide or insecticide applications, sugar and others.
- Have a marketing strategy to reflect the potential impact of a Super El Niño on crop yield.
- Plan for next year: with El Niño still occurring during wintertime, there will be a high probability of dry weather. This can reduce the water table and limit groundwater recharge over winter in Wisconsin. Consequently, the 2027 planting season could have very little subsoil moisture reserves to lean on. Consider adopting management strategies that preserve water in the soil, such as maximizing surface residue (no-till or reduced tillage), reducing soil compaction, and implementing cover crops strategically.

Although there is a 98% probability of an El Niño event, weather remains inherently unpredictable. In Wisconsin, local and regional climate patterns will likely exert more influence over the growing season than global trends. To navigate this uncertainty, producers should prioritize strategies that optimize input efficiency and reduce overall production costs.

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Introduction

Reproduction is key to profitability in beef cow-calf operations. When cows fail to conceive and calve on a yearly basis, producers lose both potential calf sales and the resources invested in maintaining that cow. Reproductive failure remains the leading cause of early culling in beef herds.

As your herd transitions into breeding season, there's a lot to prepare for, such as ensuring herd sires have passed a breeding soundness exam and cows are at an adequate body condition score.

Another consideration, at times overlooked, is the unique challenges first-calf heifers face in conceiving their second calf. Two-year-old heifers are learning to be mothers for the first time and have different nutritional needs than mature cows.

Fortunately, there are steps producers can take to better position young cows for success.

How to manage for long-term productivity

Success in the second breeding season begins with good management in the first. Selecting older heifers for replacements increases the likelihood that they will reach puberty sooner and conceive earlier in the first year. Breeding heifers to calve a few weeks ahead of the adult cow herd offers several advantages, one of which is allowing more days to recover before entering their second breeding season. While beef cows can cycle and conceive 50 to 60 days after calving, it is common for first-calf heifers to take around 10 days longer

Incorporating early pregnancy diagnosis enables producers to identify replacement heifers that are open or conceived late. Non-pregnant heifers can often be marketed in time as heavy feeders. However, open 2-year-olds face greater depreciation losses, as they will likely be sold as market cows.

Placing selection pressure on replacement heifers by implementing a shorter defined breeding season, such as 45 days, can help identify heifers with lower fertility or those mismatched to the environment while maintaining greater market value than they would as open 2-year-olds.

Nutritional management for young cows

Two-year-old heifers are still growing and have less rumen capacity in addition to the demands of lactating. Young cows may benefit from slightly more nutritionally dense rations, higher-quality forages and well-managed pastures due to their lower feed capacity.

Biology dictates that the nutritional hierarchy prioritizes lactation and the cow's own maintenance before reproduction, which includes the ability for the cow to resume cycling.

One step producers can take is to manage their replacement heifers to calve at a body condition score of 6, or 1 point higher than mature cows. Two-year-olds may need to be grouped separately at times to ensure all can access the feed bunk or to accommodate a different supplementation strategy.

Take a look at breeding decisions

Calving difficulty not only becomes a frustration during calving season but also contributes to delayed cycling and poorer reproductive performance.

Incorporating calving ease into heifer mating decisions can help reduce this problem. Young, thin or late-calving cows are less likely to return to cycling by the start of the breeding season.

Ideally, a sound year-round management plan minimizes the number of these cows. However, if you find yourself at the beginning of the breeding season with these challenges, management can make a decision to intervene now using tools from the reproduction tool kit.

For example, incorporating synchronization protocols using controlled internal drug release (CIDR) inserts containing progesterone are effective at inducing estrus in non-cycling cows.

Summary

Despite our best efforts, it's inevitable for some 2-year-old cows to leave the herd. However, it's management's responsibility to ask why when they do.

Young cows that fail due to environmental mismatch, calving difficulty or inadequate nutrition highlight opportunities for improvement in management and replacement heifer selection.

References

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6. Wilke, Karla, and Kacie McCarthy. "Chasing the Elusive Second Calf." UNL BeefWatch, 4 Mar. 2024, Despite our best efforts, it's inevitable for some 2-year-old cows to leave the herd. However, it's management's responsibility to ask why when they do.
7. Young cows that fail due to environmental mismatch, calving difficulty or inadequate nutrition highlight opportunities for improvement in management and replacement heifer selection.. Accessed 3-23-2026

Can Roasting High-Oleic Soybean Reduce Waterhemp Seed Viability?

Authored by: Dr. Ahmad Mobli and Dr. Rodrigo Werle

Introduction

Wisconsin dairy farmers are showing increasing interest in high-oleic soybean production as a valuable, high-energy feed source that can improve milk fat production and potentially increase overall farm profitability. When roasted or ground and fed to dairy cows, high-oleic soybeans offer improved oil quality, enhanced oxidative stability, and excellent feed value. As more dairy operations integrate soybean into traditional forage-based cropping systems, new agronomic and weed management questions are beginning to emerge from the field.

One question recently raised by a Wisconsin stakeholder was straightforward but important from a weed science perspective: Can roasting soybean grain contaminated with waterhemp seed eliminate weed seed viability and help reduce the spread of waterhemp through manure applications?

This question is especially relevant because waterhemp has become the most troublesome herbicide-resistant weed in Wisconsin crop production systems. Weed management can be particularly challenging in some high-oleic soybean systems because certain varieties have limited herbicide trait options, reducing postemergence weed control flexibility and increasing the importance of integrated weed management strategies.

To help address this question, #WiscWeeds Scientist Dr. Ahmad Mobli conducted a small preliminary evaluation using roasted and not-roasted soybean samples provided by Mr. Mike Gronski, Pioneer Field Agronomist from Marshfield, Wisconsin. The objective was to determine whether the soybean roasting process could reduce waterhemp seed survival in contaminated grain before the feed ultimately entered manure management systems.

According to Gronski, the soybean roasting process was conducted at approximately 570 °F (299 °C), while the soybeans themselves reached temperatures near 295 °F (146 °C) for approximately one hour. After roasting, waterhemp seed viability was evaluated through germination test (Figure 1).

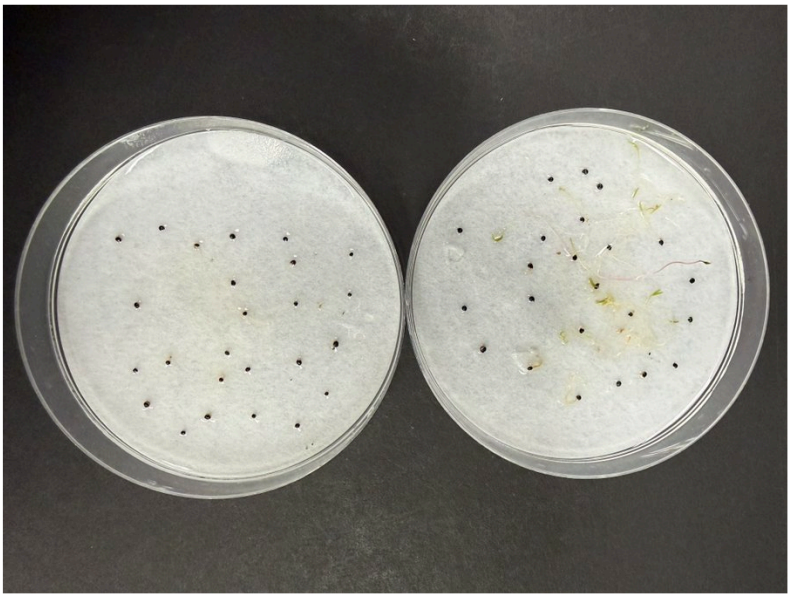

Figure 1. Representative germination response of waterhemp seed following the soybean roasting process. The left Petri dish contains roasted seed with no observed germination, whereas the right Petri dish contains non-roasted seed showing active waterhemp germination. Picture by Dr. Ahmad Mobli.

Preliminary results are encouraging (Figure 2). No waterhemp germination was observed from the

roasted soybean samples, suggesting that roasting may substantially reduce or completely eliminate waterhemp seed viability in contaminated soybean grain (Figure 1). These observations align with previous research by Norsworthy et al. (2020), which demonstrated that exposure to 572°F (300°C) for 90 seconds substantially reduced Palmer amaranth seed survival. Because Palmer amaranth and waterhemp belong to the same plant family (Amaranthaceae), these findings suggest similar responses to high-temperature exposure may occur in waterhemp seed.

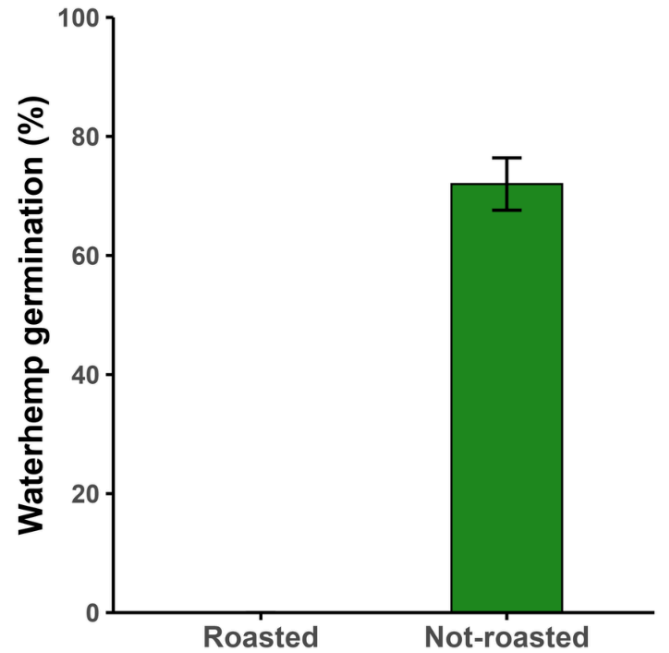

Figure 2. Effect of roasting at 295°F (146°C) for one hour during the soybean roasting process on waterhemp seed germination. Error bars represent the standard error of the mean (± SE).

Although additional research is needed, these early observations suggest that soybean roasting may provide an additional benefit beyond feed quality improvement by helping reduce the risk of spreading troublesome weed seeds through manure applications. This type of applied question directly reflects the mission of the WiscWeeds program: working closely with farmers, agronomists, and industry stakeholders to address emerging challenges associated with evolving Wisconsin cropping systems.

In addition to this preliminary work, Mr. Dan Smith, UW–Madison Division of Extension Weed Science Outreach Specialist, is working closely with stakeholders and the WiscWeeds team on a series of on-farm trials evaluating weed management strategies for high-oleic soybean production systems in Wisconsin. Stay tuned for results and field day opportunities.

As dairy farms adopt high-oleic soybean for improved feed quality and profitability, integrated weed management strategies will become increasingly important for protecting both crop productivity and long-term sustainability. In forage-based systems such as corn silage and alfalfa, crop harvest often helps suppress or prevent weed seed production. Soybean grain production, however, is different. Successful soybean production requires season-long weed management to protect yield potential, maintain grain quality, and facilitate harvest efficiency. While weed escapes may be less concerning in silage corn or alfalfa systems, they can create significant agronomic and economic challenges in soybean production systems.

For readers interested in learning more about agronomic management considerations for high-oleic soybean production systems, including identity preservation, weed management, disease management, and feed considerations, see the UW–Madison Extension article "Field Management of High Oleic Soybeans for Feed."

Reference

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