

Agriculture, Broadband and Rural Development Hearing

Grant Anderson Chairman---AFREC

Bruce Montgomery –AFREC Coordinator



AFREC: Agricultural Fertilizer Research and Education Council

This program was created by the MN Legislature to ensure that Minnesota farmers and ag professionals have access to high quality fertilizer recommendations and “state of the art” technology.

Since conception in 2009, AFREC has invested over \$13 Million into soil fertility research and education projects.



What Does AFREC Provide?

AFREC's mission is to improve fertilizer efficiency, farm profitability, and Minnesota's agricultural environment

AFREC provides leadership, long-term funding, leveraging, and coordination across farm organizations, industry, academics and state government

How is AFREC Funded?

- 40 cents per ton on all fertilizers sold
- Statewide average is approx. 6 to 8 cents per acre per year
- Vast majority (95%+) of the funds are provided by fertilizers used for agricultural production
- \$1.0 to \$1.2 Million is available for grants each year
- Grants are competitive—anyone can apply

How do AFREC Fees Compare to Other States/Programs?

All Fertilizer Tonnage Fees by State



Average Tonnage Fee Across Midwestern States \$0.79/Ton

Tonnage Fees Dedicated to Research, Outreach, and/or Technical Assistance



Average "Research" Fee Across Participating States \$0.51/Ton



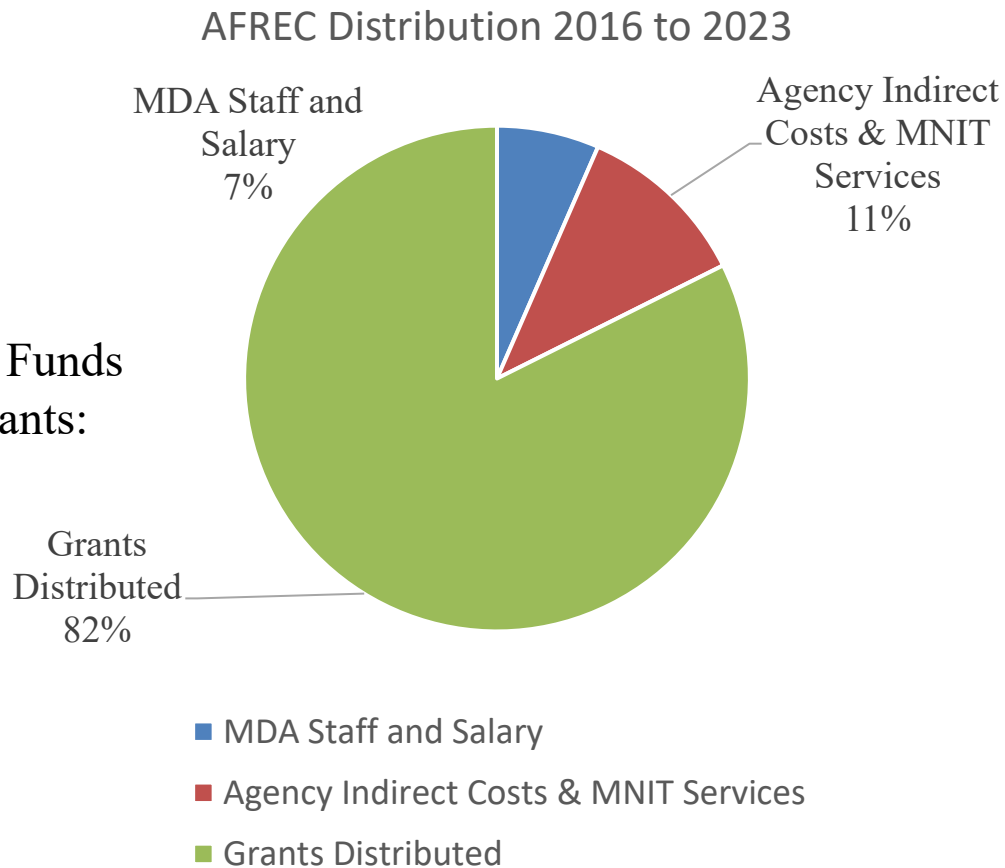
Agricultural Fertilizer Research & Education Council



Quick Look at AFREC's Budget

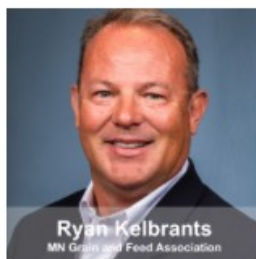
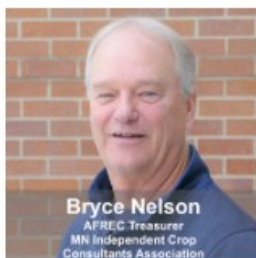
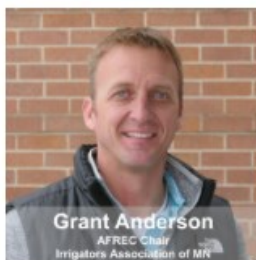
(Averaged Across the Last Seven Years)

Average Annual Funds
Available for Grants:
\$1.05 Million



AFREC Council Membership

COUNCIL MEMBERS



FORMAL MEMBERSHIP

- MN Crop Production Retailers;
- MN Corn Growers Association;
- MN Soybean Growers Association;
- Sugar Beet Growers Industry;
- MN Association of Wheat Growers;
- Potato Growers Industry;
- MN Farm Bureau;
- MN Farmers Union;
- MN Irrigators Association;
- MN Grain and Feed Association;
- MN Independent Crop Consultant Association or CCA

Ex Officio from UM, MDA, and Edible Beans

AFREC Accomplishments

2008 - 2023

- Development of unbiased and scientifically defensible Fertilizer Guidelines and associated 4Rs/BMPs
- Huge improvements in fertilizer education
- MDA has managed over 250 individual awards, most in partnership with the University of Minnesota
- Serves as the “cornerstone” for all fertility research across the various commodity groups

The “Return on Investment” is Huge

2022-2023 U of M economic analysis of AFREC research

- Analyzed 5 AFREC-funded projects
- **Crops:** corn, soybean, alfalfa, sweet corn
- **Economic benefits:** ranged from \$970K to \$65 million per project
- **How?**
 1. Increased crop yields
 2. Reduced fertilizer costs
 3. Best management practices increased yields / reduced costs

\$13 million
spent on all
AFREC
projects
since 2008

\$159 million
total potential
economic benefit
to Minnesota
from 5 AFREC
projects

Extension Has Created a National Educational Model for Nutrient Related Outreach

UNIVERSITY OF MINNESOTA
EXTENSION

NUTRIENT MANAGEMENT

UMN-AFREC Communications Update

Here is a recap of UMN-AFREC communications work in October, November and December 2023, and a look at what is happening in the months ahead

OVERVIEW

- 10 nutrient management posts were published on the Minnesota Crop News blog this quarter. They generated 11,136 total views.
- The UMN Extension Nutrient Management Facebook page now has 7,399 followers while the X (formerly Twitter) page has 2,570 followers.
- AFREC's website, [MNsoilFertility.com](https://mnsoilfertility.com), experienced a new quarterly high of 1,327 unique pageviews.

QUICK NOTES

- The AFREC website has been updated and new features have been added: [Research Reports](#) are now organized by year, crop, and topic; Minnesota Crop News blog posts discussing AFREC research are now republished on the [Insights](#) tab; And there is a new [Legislative](#) page that features an [8-page](#) [handout](#) about the program.

OCTOBER

- Minnesota Corn [highlighted AFREC](#) in an article on their website and shared it in their email newsletter. The article will also be in the Winter 2024 print edition of Corn Talk magazine.
- Dan Kaiser's blog post clarifying the [differences between phosphorus fertilizer sources](#) was very successful, generating over 3,100 clicks.



The 8-page AFREC Factsheet for Legislators is now available as a printable PDF on the [AFREC website](#)

- Carl Rosen reflected on his AFREC-funded [potato nutrient management research](#) in a blog post. Carl's insights were covered by Potato News Today and the Red River Farm Network.
- October's podcast episode examined [fall soil sampling BMPs](#), featuring Dan Kaiser, Lindsay Pease, Fabian Fernandez, and Brad Carlson.
- Brad Carlson blogged about [fall nitrogen management](#). This led to an article in [The Farmer magazine](#) on tips for applying anhydrous ammonia. He also discussed [nitrogen management after a dry summer](#) in an AFREC Spotlight radio segment on the Linder Farm Network.

- Check out [Morning Ag Clips'](#) popular email newsletter and website for ads promoting U of M Extension and AFREC nutrient management offerings. They started in October 2023 and will run through March 2024.

NOVEMBER

- A full-page ad promoting AFREC and U of M Extension nutrient management offerings appeared in the [November-December 2023 issue of Soybean Business magazine](#).
- Dan Kaiser's AFREC project on [how different sources of sulfur fertilizer behave over time](#) was the topic of a post that accumulated nearly 3,000 views.
- November's podcast episode was on [side of field N and P reduction strategies](#), with Brad Carlson, Jeff Strock, and Laura Christianson.
- Lindsay Pease authored a post on her AFREC-funded study on [how soil properties evolve over time in subsurface-drained fields](#).
- For media appearances, [AgWeek](#) covered Dan Kaiser's research on spring urea and sugarbeet production, Melissa Wilson appeared in [Manure Manager](#) discussing liquid manure injection, and guest on the [Iowa Learning Farms](#) [webinar](#) discussing her and Melissa's ManureDB database, the largest manure nutrient database in the U.S. Nancy also authored an article in the [Journal of Nutrient Management](#) on ManureDB.

DECEMBER

- Our December podcast covered [nitrogen management and water quality in southeast Minnesota](#) with Brad Carlson, Jeff Vetsch, and Greg Klinger from Olmsted County SWCD.
- For media appearances, Dan Kaiser appeared in a [RealAgriculture](#) article on sulfur fertilizer sources and in a [Wallaces Farmer](#) article on IDC in soybean, Anna Cates discussed soil resiliency on [RealAg Radio](#), and Chryseis Modderman talked manure and tillage in an [AgWeek](#) article.

LOOKING AHEAD

- Our January podcast episode will be an AFREC research round-up, featuring updates on several AFREC projects and discussing the importance of the program.
- Help us spread the word about February's Nitrogen Conference and Nutrient Management Conference. [Registration is now available!](#)



AFREC
Agricultural Fertilizer Research & Education Council

MN SOIL FERTILITY

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A DEPARTMENT
LURE

Agricultural Community Support for AFREC

- Legislative authority to collect the fees will sunset June 30, 2024
- All 11 farm organizations strongly support the continuation of the AFREC program
- Recommend keeping the fee at 40 cents per ton
- Retain the existing program structure
- Reauthorize for another 10 years (MN Statutes 18C.70, 18C.71, 18C.80, and 18C.425)



Questions?

Please visit MNSOILFERTILITY.COM
for additional information

Thank You

