





Equipping farmers to build resilient farms and communities.



**Jake Hendrickx** runs a diversified crop and livestock farm in northern Minnesota where he uses diverse cover crop mixes and extended rotations. To build nutrients, soil biology, and provide forage for his cattle, Jake seeds up to 13 species in a cover crop mix following his small grains harvest. He also prioritizes winter-kill cover crops that allow him to reduce herbicide use and to save time ahead of planting corn, and uses soil tests to tailor a cover crop mix to the nutrient needs of a field. For example, using legumes to build nitrogen (N) or mustard to build sulfur.

**Luck with clover:** Jake uses crimson clover at 3-4 lbs per acre in his cover crop mixes, which winter-kill. Particularly ahead of corn, he wants to use this clover to build N in the soil. The clover must be in the ground early to ensure the fall growth is sufficient. "If we are seeding a mix after barley or peas, the long growing season allows us to use clover. But after soybeans or edible beans we might not have a large enough window to include clover in the mix," says Jake. If the clover happens to survive the winter it can easily be terminated in the spring with a cultivator.

**Reducing Applied N:** Jake has cut his N-rates for corn in half over the past couple of years, from 220 lbs of N per acre to about 100 lbs per acre. "We totally switched our programming. We have NPK in the starter, but we are now more heavy on trace minerals and starter biology," he notes. Jake plans to use a starter of 2.5 gallons per acre of CX-1, an organic biological concentrate, and 2 quarts per acre of high energy fish



fertilizer made from whole fermented salmon, for nutrients.

### **PROGRAM UPDATES**

#### Get updates for future shared learning calls



# Shared learning calls return in June!

Need a day-of reminder?

We're transitioning our reminder emails to a new list - sign up to stay in the loop!

Click here to receive a day-of reminder for each call.

#### Southern Iowa market available for oats

If you're holding on to last year's oats or figuring out where to sell your 2022 crop, consider delivering to Smithfield Grain in Davis City, Iowa.

Bids are listed on their website, oats below 38 lbs/bushel are accepted but subject to monetary discounts. (Example from late April at left. These bids are subject to daily changes in the CBOT futures market.)

#### Oats

| Delivery | Bid  |
|----------|------|
| April 📶  | 4.72 |
| May 📶    | 4.79 |
| June 📶   | 4.79 |
| July 📶   | 4.79 |
| August 📶 | 4.79 |

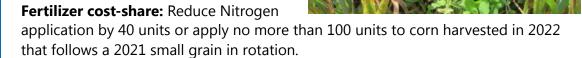
**Curious to learn more?** Contact information is located at the **bottom of their discount schedule**.

#### Cash in on our cost-share

Don't leave money on the table! There's still time to <u>apply for both of PFI's</u>

2022 cost-share offerings. Each pays \$15 per acre on up to 200 acres.

**Small grains cost-share:** Harvest a small grain and follow it with a frost-seeded or summer-planted cover crop that contains at least one legume.



Available for farmers in Iowa, Illinois, Wisconsin, Minnesota and Nebraska. Acres must be conventional or in transition to organic. Acres may not be able to overlap with EQIP or private carbon programs. Please inquire to learn more.



### IN THE FIELD

#### Clover as a corn companion crop

This <u>2021 Cooperators' Program</u> research explores allowing established clover to grow with corn as a companion crop or living mulch.

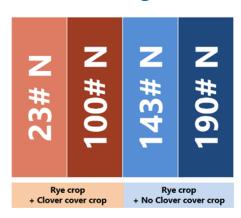
Farmers **Jack Boyer** and **Dick Sloan** hypothesized that suppressing (and then eventually terminating) the clover cover crop would not reduce



corn yields compared to terminating the cover crop at corn planting.

Find out if the data supported their hypothesis!

#### **Estimating N-credits from legume cover crops**



What kind of N credit can a legume cover crop provide?

In this blog, explore the nitrogen fixation potential of legume cover crops, decomposition of cover crops for N release and "try it yourself" basics for conducting experiments with different nitrogen rates.

#### **Grow your own nitrogen**



Learn how farmers have incorporated legumes to grow their own nitrogen to benefit soil health and their overall profitability.

This magazine article highlights the tactics different farmers are using to ensure they're able to benefit from the nitrogen fixation of a legume in their rotations.

### Nitrogen fertilizer for food-grade oats

This Cooperators' Program research report walks through how A.J and Kellie Blair adjusted their nitrogen rates, attempting to achieve maximum oat yield on their farm.



The trials compared three N rates (25, 50, and 75 lbs per acre) for their foodgrade oats.

The Blairs reported on their cost savings and what rate worked best for them.

#### **Additional resources:**

- Blog: <u>"Green Manure Cover Crop Seeding and Termination Dates in a Corn-Wheat Rotation"</u>
- Blog: <u>"Small Grain Fertility"</u>
- Blog: <u>"Fertilizers, Herbicides and Fungicide for Small Grains"</u>
- ATTRA Toolkit: "How to Reduce Synthetic Fertilizer Use"

#### **UPCOMING EVENTS**

All times listed are Central Daylight Time

#### May 4: Webinar - Make Your Best Alfalfa Ever In 2022

Hosted by: I-29 Moo University & Jeff Jackson

Noon-1 p.m. | Online

# May 2-5: Conference - Craft Brewers Conference & Brew Expo America

Hosted by: The Brewers Association Minneapolis, MN

# May 5: Workshop - Grain Culture: A Panel Discussion

Hosted by: Artisan Grain Collaborative & Elawa Farm 5-7 p.m. | Lake Forest, IL

# May 11-12: Conference <u>Distillers</u> <u>Grains Symposium</u>

Hosted by: Distillers Grains Technology Council Omaha, NE

More upcoming events

#### **STRAW POLL**

How much Nitrogen have you been able to cut from corn in extended rotations?

10-20 lbs of N per acre

Select

| Select |
|--------|
| Select |
| Select |
| Select |
| Select |
|        |

#### **Previous poll results:**

How do you think about your small grain seeding rate?

- Pounds per acre 50%
- Bushels per acre 30%
- Seeds per acre 20%

Send us your straw poll ideas! We want to know what YOU want to know. Reply to this email with your ideas for the next poll.

#### STAY CONNECTED











## **Looking for more? Contact us today!**

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