

SUMMER 2023



PAGE 8



Photo by Krysti Mikonen

Cover Credits

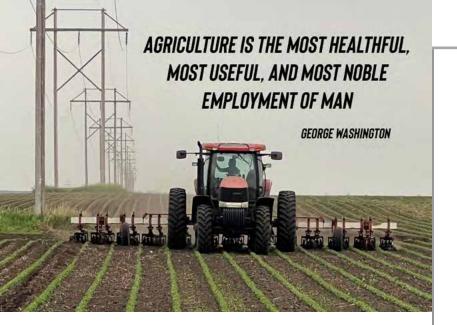
Johnson Farms outside of Madison, SD has been hosting field days for years. Charlie Johnson, an active NPSAS member, takes the time to share their families experience and knowledge.

It's a gift to those who want to connect with and see first-hand an organic operation, or are curious or interested in organic production. It's especially helpful for those who are considering transitioning to organic.

The Johnson's rich history in organic production going back to the 70's has tried and failed so you don't have to and now they are a model farm in the industry.







From the President	4
From the Executive Director	5
Board Minutes	6
Industry News	7
2023 NPSAS FIELD DAYS	8
Organic/Sustainable Ag Tours Set at Carrington Center	9
South Dakota's First Hemp Processing	
Plant Opens	\Box
Proven Cover Crop Benefits	15
Doug & Anna Crabtree 2024 NPSAS	
Food and Farming Conference Keynote	
Speakers	18
NPSAS Buckwheat is Growing in Popularity	20
Discover the Delights of Cooking with Ancient Grains	22
Recipes: Ancient Grain Salad Spelt Banana Bread	23
Moving to Regenerative Organic Production	24
Alfalfa Can Play Valuable Role in Transitioning to Organic Farming	27
Food and Farming Conference Call for	
Content & Speakers	29

Advertising Directory

Red River Commodities	02	MOSA	17
Dramm Corp.	02	NuLine	18
F.W. Cobs Company Inc.	04	Mountain High Organics	19
Cashton Farm Supply	05	Albert Lea Seed	19
Johnson Farms	10	Grain Millers	19
Stengel Seed & Grain	14	Healthy Food Ingredients	21
Blue River Organic Seed	17	MCIA	28
SARE	17	Northern Crop Institute	31
OFARM	17	Truax Company Inc	32

Mission Statement

Northern Plains Sustainable Agriculture Society promotes sustainable food systems through education, advocacy, and research.

Staff

Executive Director

Krysti Mikkonen | director@npsas.org | (605) 380-3770

Administrative Support Specialist Kelly Monroe | info@npsas.org

Board of Directors

President: Martin Goter Woodworth, ND | (910) 279-0757

Vice President: Mike Jorgenson Clinton, MN | (320) 273-2437

Treasurer: Brad Wolbert Cathay, ND | brad.r.wolbert@gmail.com | (701) 368-9895

Secretary: Randy Nelson Moorhead, MN | nels1657@umn.edu | (218) 299-5020

Rich Horsley Fargo, ND | richard.horsley@ndsu.edu | (701) 231-8142

Steve Zwinger Carrington, ND | steve.zwinger@ndsu.edu | 701-653-5584

> Nichole Hensen Fargo, ND | nichole@nicholefinepastry.com

> > Roger Tesla

Inwood, Iowa | naturesbest@alliancecom.net | 605-370-2249

Northern Plains Sustainable Agriculture Society Office PO Box 444 | Frederick, SD 57441

Visit our website: www.npsas.org or e-mail: info@npsas.org

Basic Membership (includes subscription) \$40 student, \$75 family, \$300 business, \$1500 lifetime

Optional Supporting Membership:

Benefactor – \$75 • Steward – \$100 • Sustainer – \$150 Community Builder – \$200 • NPSAS Patron – \$500 and up

The Germinator is published quarterly by Northern Plains Sustainable Agriculture Society (NPSAS), a 501(c)3 non-profit organization.

Contributions to NPSAS are tax deductible.

Advertisements in The Germinator do not constitute endorsement of any advertised business, product or service.

NPSAS occasionally includes guest articles and opinions. The opinions in these articles may not reflect the opinions or policy of the Northern Plains Sustainable Agriculture Society or its Board of Directors.

From the President

I hope everyone has had a good spring! If you're a farmer you've gotten/are getting all of your crops in the ground, and if you're a rancher you're maintaining your livestock and probably even putting up hay by now. I farm myself, and even though I am a relatively small farmer (around 1000 acres); I have had one of those planting seasons that really tested my patience, and have only finished here in the past week. It is always a good feeling when you're on that last 20 acres, until on those last 20 acres you have another breakdown and have to come back and finish the next day instead! That being said, I am blessed to be done and it is only through these tests of patience that we continue to grow. I also learned the value of community and of building strong ties with neighbors through this process. As I reflected on that sitting in the tractor I figured it would be a good time to touch on that this quarter, also...I was running close to the deadline on getting my article done, so win win.

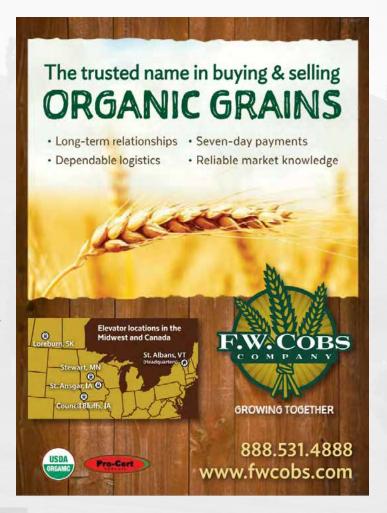
So, neighbors and my little short story begins with a broken tractor. There I was making good time getting my peas in the ground, about 200 acres finished with about 800 more to go and the good ole 8770 decides it doesn't feel like running anymore. There's a longer story behind that, but multiple repair calls later and it still sat in the yard..not running. I was a bit desperate at that point, only about a quarter done and everyone was hitting the ground running and

calling around. No one had a tractor to rent; friends, dealerships, no one. I had some field cultivating and seed cleaning to get done, so I wasn't dead in the water; just a bit held up on seeding at that moment. Then out of the blue, a neighbor, someone who I would not have expected but really hadn't had a whole lot of conversation with in the past, had a tractor I could use. Long story short, I finished the rest of my planting using his tractor.

It is good to build strong relationships within your community and to know your neighbors, you never know when you may need a helping hand or to offer one yourself. Looking at this a little deeper, the Bible instructs us to love our neighbors: I have heard biblical scholars argue the question of who is our neighbor. Just because somebody lives next to us or near us, are they our neighbor? I've had "neighbors" that have watched me farm over the past 10 years just waiting for me to fail, and have approached landlords offering more money and a different style of farming succeeding in taking valuable acres away from me. Are these "neighbors" of mine? I don't believe they are, I am more inclined to believe that neighbors are not defined by their geographical location to you, rather they are anybody anywhere that lives by the tenets mentioned in the Bible as well as other ancient texts; treat others as you would want others to treat you, or something close to that.



President Martin Goter





Executive Director Krysti Mikkonen

(F)

Organic Specialists

Cashton Farm Supply, Ltd. 300 State Hwy 27, Cashton, WI 54619

- Purchaser and End User of All Organic Grains
- Complete Organic Poultry Rations
- Organic Proteins and Grains
- Livestock Vitamins & Minerals
- Organic Poultry Premixes
- Náturall Fertilizer
- Crop Protection, Lawn & Garden
- Greenhouse

All Products are Approved for Organic Use

CFS Specialties, Inc.
800-822-6671 FAX 608-654-5696
E-Mail: organic@cfspecial.com
www.cfspecial.com

Farm Like No One is Watching

Last month in the Road To Organic feature of this publication there was an article from Brad Wolbert, board member and organic farmer who is transitioning the farm. He farms with his father-in-law who provided an insightful spot-on observation. He said, "Farming would be easy if no one was watching."

There are few careers in the world where everyone around you can see your daily failures and successes. All the neighbors see exactly what you are doing, how you are doing it, and if you're doing something most people aren't doing, the door to judgement swings wide open. It makes me wonder, how differently many farmers would farm if no one was looking. What would you want to try but don't because everyone can watch?

You have to have pretty thick skin to farm differently than your neighbors. If you do farm differently, be prepared

- To be judged.
- To be talked about.
- To be scorned

In addition to the negative insights from people, I believe there are a number of positives that come out of it too. Be prepared to

- To learn a lot
- To inspire people
- To be challenged
- To be admired for trying new things

I wonder what percentage of farmers would actually choose to try more things, convert to organic production, or change their farming practices significantly if no one was looking. How many people are stuck in this world often caring too much about what people think? As an organization NPSAS is working harder than ever with grant funding available to us, to help farmers who are interested in converting to certified organic production. If you are one of those farmers or you know someone that is. Have them give us a call and we'll help in any way we can in your transition journey. Know that NPSAS is here to help connect you to like-minded individuals and provide insight and education. We're here to challenge you, inspire you, and educate you, and because we sincerely want to encourage you to farm like no one is watching.



Industry News Soard Business

NPSAS Board Business Summary

Financial Report - Brad Wolbert gave a high-level overview of February and year to date preliminary financial reports. Brad noted that NPSAS bank account is now with Dakota Bank. Krysti is listed on the account and past staff will be removed from the account.

Executive Director Report

- All bills and invoices from the conference should be finalized.
- The Germinator should be printed the first week in April. Staff is sorting through advertising contracts and adding advertisers.
- There was a Farm Breeder Network event.
- An E-Sprout went out with hopes for more consistent distribution. A National Ag Day webinar was hosted with Glen Rabenbert.
- The Building a Resilient Future Grant Project is continuing with monthly meetings and planning for other regional events, a South Dakota field day and next year's NPSAS conference.
- Krysti is working with Glen Philbrick on the USDA Transition To Organic Production Partnership (TOPP) grant administered through OCIA. The grant covers Farmer to Farmer Mentorship,
- Community Building with face-to-face networking like field days, technical assistance, and workforce development.
- There is an ongoing search for women in North Dakota and South Dakota for Women in Ag training and events.

Governance/Strategic Planning

The Board retreat will be Monday, March 27 in Aberdeen, SD.

NPSAS MINUTES SUMMARY -April 2023

Financial Report- The Holiday Inn submitted their bill for hosting the 2023 winter conference. Krysti is looking for better interest rates on the CD's. The financial institution managing the NPSAS accounts is Dacotah Bank. The CD's were cashed in for deposit into higher interest rate money market accounts.

Executive Director Report

A patron has donated a sizable chunk

of land to NPSAS near Wahpeton.

- The land is being left to the organization in a will. Krysti will look into how to handle this land as there may be some issues of a non-profit corporate owning land according to SD State law and how the land can be used to benefit the mission of the organization upon the patrons passing.
- The Spring Germinator was completed and ready to print. The expenses for the Germinator were reviewed.
- Looking for 6 women, 3 in ND & 3 in SD for Women in Ag Grant worth \$12,666 over two years.
- The TOPP grant and budget was provided to the board and feedback was requested
- Summer field days are being planned
- Speakers are being sought for Quarterly Webinars
- Discussion was held regarding an outstanding bill from a grant in 2021
- The official address for NPSAS has been changed to PO Box 444, Frederick, SD 57441

Farm Breeder Network

Upon recommendation from the Farm Breeder Network, the board voted to surplus some of the equipment purchased with grant money from Farm Breeder Network projects. The equipment being sold by NPSAS includes two allis Chalmer combines, one 20' flatbed trailer, an Almaco push planter and two Kirschenman drills. There is also a tabletop Red Mill (GrainMaker Bitterroot Tool and Machine Company Model no. 116) that will be put up for auction in the winter of 2024.

Governance/Strategic Planning

The board still has 2 vacant positions that need to be filled. There needs to be some representation from South Dakota. It is hoped that these will be filled by a producer from South Dakota.

NPSAS MINUTES SUMMARY -May 2023

Financial Report- NPSAS has machinery and grain for sale. The CD terms ended mid-April. Executive Director Krysti checked around to find better rates for NPSAS CD's. Krysti found a money market fund that has a current interest rate of 5%. Money is more accessible in the fund when compared with

a CD and there are no penalties for withdrawal.

Executive Director Report

The CD's were cashed and work began to get the money market accounts set up. A membership retention and invitation plan was established. An idea was presented to the board regarding sponsorship advertising for events and The Germinator.

A preliminary grant was submitted. Feedback shared by the administrators is that the TOPP Grant parameters were changed. Mentorship funding was a major component of the NPSAS proposal, however that is being covered at a higher level through OCIA. Krysti will revamp the proposal and resubmit.

Tentative Summer field days are:

July 18 - NDSU Research Center & Afternoon SARE NPSAS Event - Carrington, ND

July 20 - Charlie Johnson - Madison, SD

August 4 - 5 - SD Hemp Association Decortication Plant Open House & Hemp

Conference - Winfred, SD

August 25 - Stengel Seed - Madison, SD

August 29 - Brad Wolbert - Cathay, ND

Speakers for Quarterly Webinar Speakers

Paul Detloff - June 28, 2023

Bob Quinn - September 26, 2023

Chad Fiese - December 2023

Krysti & Board Chair, Martin, are reviewing website options of Memberleap vs. building an independent website. There are a number of benefits to Memberleap, but it may be more advantageous to build a WordPress website with usable plugins to save on costs.

Governance/Strategic Planning

- Roger Tesla of Inwood, IA, a sponsor and previous board member, indicated he would be willing to serve on the board. Martin will discuss this with him further.
- Discussion was held regarding the executive director contract and the executive assistant position. The board would like to solidify a contract.

These minutes are a complete summary of official minutes presented by NPSAS Board Secretary, Randy Nelson.



Industry News

USDA Announces Corrections to Emergency Relief Program Policy to More Accurately Reflect 2020 and 2021 Natural Disaster **Impacts on Crops Intended for On-Farm** Use

The U.S. Department of Agriculture (USDA) is updating the Emergency Relief Program (ERP) Phase Two to provide a method for valuing losses and accessing program benefits to eligible producers of certain crops, including grapes grown and used by the same producer for wine production or forage that is grown, stored and fed to livestock, that do not generate revenue directly from the sale of the crop. These updates ensure that ERP benefits are more reflective of these producers' actual crop losses resulting from 2020 and 2021 natural disaster events. USDA's Farm Service Agency (FSA) will begin accepting ERP Phase Two applications from eligible wine grape and forage producers once this technical correction to ERP is published in the Federal Register and becomes effective, which it anticipates will be on Friday, June 16, 2023. The deadline to submit applications for ERP Phase Two is July 14.

More Than 1 Million Acres Accepted in Offers Through **Conservation Reserve Program General** Signup

Agriculture Secretary Tom

Vilsack announced today the U.S. Department of Agriculture (USDA) is accepting more than 1 million acres in this year's Conservation Reserve Program (CRP) General signup. This is one of several signups that USDA's Farm Service Agency (FSA) is holding for the program. The results for CRP General signup reflect the continued importance of CRP as a tool to help producers invest in the long-term health, sustainability, and profitability of their land and resources. The signup's results include 6,714 acres in South Dakota.

Application Deadline for Revenue Loss **Programs Extended to** July 14

The U.S. Department of Agriculture (USDA) is extending the deadline for the Emergency Relief Program (ERP) Phase Two and Pandemic Assistance Revenue Program (PARP) to July 14, 2023, to give producers more time to apply for assistance. The original deadline was June 2.

Assistance to Help Organic Dairy Producers Cover Increased Costs

The U.S. Department of Agriculture (USDA), announces assistance for dairy producers with the new Organic Dairy Marketing Assistance Program (ODMAP). ODMAP is established to help mitigate market volatility, higher input and transportation costs, and unstable feed supply and prices that have created unique hardships in the organic dairy industry. Specifically, under the ODMAP, USDA's Farm Service Agency (FSA) is making \$104 million available to organic dairy operations to assist with projected

marketing costs in 2023, calculated using their marketing costs in 2022.

Emergency Relief Assistance for Agricultural **Producers Who Incurred Losses Due to** 2022 Natural Disaster **Events**

Fri May 19, 2023 03:41 PM

Agriculture Secretary Tom Vilsack today announced plans to roll out \$3.7 billion in Emergency Relief Program (ERP) and Emergency Livestock Relief Program (ELRP) assistance to crop and livestock producers who sustained losses due to a qualifying natural disaster event in calendar year 2022. USDA is sharing early information to allow producers time to gather documents in advance of program delivery. Through distribution of remaining funds, USDA is also concluding the 2021 ELRP program by sending payments in the amount of 20% of the initial ELRP payment to all existing recipients.

USDA Accepting **Applications to Help Cover Costs of Organic Producers**

The U.S. Department of Agriculture (USDA) will cover up to 75% of the costs associated with organic certification, up to \$750 per category, through the Organic Certification Cost Share Program (OCCSP). North Dakota and South Dakota Farm Service Agency (FSA) encourages organic agricultural producers and handlers to apply for OCCSP by Oct. 31, 2023, for expenses incurred from Oct. 1, 2022, through Sept. 30, 2023.





2023 Field Days

Great Information/Great Speakers

July 18 NDSU, SARE, & NPSAS in Carrington, ND

9:00 am - 12:00 noon - LUNCH -1:30 pm - 4:00 pm Carrington Research Center is 3.5 miles N on Hwy 281

July 20 **Johnson Farms in Madison, SD**

8:30 am - 1:00 pm 24311 452nd Ave.

August 4 - 5 **Complete Hemp Processing Open House & Conference** in Winfrid, SD

1:00 pm Aug. 4-12:00 pm Aug 5th 530 Main Str.

August 25 Stengel Seed (50th Anniversary) in Milbank, SD

10:00 am - 2:00 pm 14698 State Hwy 15

August 29 **Brad Wolbert in Cathay, ND**

8:30 am - 1:00 pm 1760 52nd Ave NE

United States Department of Agriculture Agricultural Marketing Service National Organic Program Transition to Organic Partnership Program



Organic/Sustainable Ag Tours Set at Carrington Center

Regenerative soil health in organic/sustainable agriculture is the focus of a tour being held during the North Dakota State University Carrington Research Extension Center's annual field tours on July 18.

The organic/sustainable agriculture tour is one of several tours offered during the field day. The morning organic/sustainable agriculture tour's theme is regenerative soils and the afternoon tour's theme is local foods. Other tours are agronomy, northern hardy fruit and beef production. The afternoon sessions will focus on agriculture technology, and farm safety.

The center's 64th annual field day begins at 9 a.m. with registration, coffee and a welcome. The morning organic/sustainable agriculture tour will depart at 9:30 and continue until noon with lunch provided. After lunch, SARE and NPSAS will host additional networking and education from the fruit orchard at the



Field day participants learning about organic farming at the 2022 NDSU Carrington Research Center in Carrington, ND.- Photo by Krysti Mikkonen

research center. The Carrington Research Education Center is 3.5 miles north of Carrington on U.S. Highway 281.

The day will end with net-

working and conversation talking about strategies to convert to organic production at the Dakota Sun Gardens and Winery located at 955 73rd Ave NE in Carrington, ND.

NDSU Carrington Research Morning Tour

9:00 - Registration & Coffee

- Welcome: Lindy Berg & Jeff Gale, SARE Co-coordinators 9:30
- Tour Departs
- Protecting Soil Surface: Paul Debort
- Diversity of Plants Claire Keene
- Value of Continuous Roots: Jeff Gale
- Integrating Livestock (manure): Ezra Aberle
- Minimize Soil Disturbance: Martin Goter

SARE & NPSAS Afternoon Tour

1:30 pm - Travel to fruit orchard

- Northern Hardy Fruits Kathy Wiederholt
- Cider Making Gretchen Merryweather
- Local Foods & ND Dept of Ag -Angie Oberg
- Northern Plains Sustainable Ag -Krysti Mikkonen

3:00 pm - Head to Dakota Sun Gardens &

Winery for self-guided tour & networking

United States Department of Agriculture Agricultural Marketing Service National Organic Program Transition to Organic Partnership Program



Visit events @ NPSAS.org for more info and links for NDSU or call them at 701-652-2951 Carrington Research Center is 3.5 miles N. on Hwy 281







United States Department of Agriculture Agricultural Marketing Service National Organic Program Transition to Organic Partnership Program





Organic Tour

10HNSON

Thursday, July 20, 2023 St. Peter on the Prairie Madison, S.D. 8:30 am to 1 pm

Farmer Panel

USDA

ORGANIC

- SDSU Oat Variety Field Trial
- Tour of Johnson Farms
- Free Lunch!

Schedule

8:30 Coffee and registration

9:00 Farmer Panel

9:45 SDSU Oat Variety Field Trial

10:00 Tour of Johnson Farms

12:30 Return to The Prairie, noon lunch

Attendance will be limited! Please contact Charlie at 605-270-2665, Aaron at 605-695-0847 or Krysti at 605-380-3770 or e-mail: cjorganic81@gmail.com if you plan to attend.

Location

St. Peter on the Prairie, 24311 452nd Ave, Madison, SD

Cosponsored by Northern Plains Sustainable Ag

South Dakota's First Hemp Processing Plant Opens

United States Department of Agriculture
Agricultural Marketing Service
National Organic Program
Transition to Organic Partnership Program

hree days of South Dakota industrial hemp events will highlight the rapidly growing industrial hemp industry both in South Dakota and in the United States. Events August 3-5, 2023 at Horizon Hemp Seeds (Willow Lake, SD) and Complete Hemp Processing (Winfred, SD) will demonstrate the supply chain of the expanding industrial hemp industry in South Dakota from the seed to product, including a demonstration of hemp's use in building materials.

"This will be an opportunity to tour the first hemp fiber processing facility in South Dakota; to hear from three successful South Dakota hemp farmers; to tour hemp fields and to learn about hemp building materials," said Ken Meyer, Vice-President, at Winfred, SD-based Complete Hemp Processing. Events are free and open to the public with online registration.

Speaking at the conference will be leading hemp industry experts from South Dakota, North Dakota, Nebraska, California, Colorado, Tennessee, Utah, and Pennsylvania. The event will also feature live music and catered food available for purchase.

Events begin on Aug. 3 with a Field Day at Horizon Hemp Seeds in Clark, SD, with 22 varietals on display. Registration link: https://www.eventbrite.com/e/industrial-hemp-field-day-tick-ets-643817313917



Derrick Dohmann (right) of Horizon Hemp seed shared with past hemp field day attendees tips for a successful hemp crop.



You can learn a lot about hemp at a field day like this one from 2021 or at the decortication plant grand opening and hemp conference - Photo by Krysti Mikkonen

August 4-5, a two-day Conference and Open House at Complete Hemp Processing in Winfred, SD will include presentations on oil seeds, farm equipment, building materials, genetics, regenerative farming and more. A two-day hemp building workshop will allow visitors to see hemp building materials in action. Registration link: https://www.eventbrite.com/e/642512812117

South Dakota Leads the Way in Hemp

According to the USDA-NASS Hemp Acreage and Production 2022 Survey, South Dakota last growing season planted 2,800 acres of industrial hemp and was the number one state for number of harvested acres of industrial hemp with 2,550 acres harvested.

Preliminary data indicates that South Dakota in the current 2023 grow season will plant even more acres of industrial hemp than last year as a significant number of South Dakota farmers see good profit potential in adding industrial hemp as another cash row crop into their rotation with corn and soybeans.

Infrastructure for processing industrial hemp fiber is keeping pace with South Dakota's hemp farmers and is one of the success stories celebrated by the hemp events scheduled for August 3rd to August 5th. Complete Hemp Processing is opening its hemp fiber processing facility in Winfred, South Dakota and Dakota Hemp, LLC in Wakonda, South Dakota is opening a second hemp fiber processing facility by year end.

In front of all this progress of farmers growing hemp and processors coming on board has been Horizon Hemp Seeds, providing an in-state resource for purchasing hemp seed varieties that grow well in South Dakota. These events will showcase the progress of South Dakota's hemp industry.



Industrial Hemp

CONFERENCE & OPEN HOUSE

Complete Hemp Processing / AH Meyer and Sons Inc 530 Main Street Winfred, SD

August 4th Agenda

8:00 am	Registration Desk Opens			
9:00 am	am Hempcrete Workshop Begins			
1:00 pm	Open House Begins			
1:00 - 1:25 pm	Key Note Speaker, Roger Gussiaas, Healthy Oil Seeds			
1:30 – 2:00 pm	SD Representative Oren Lesmeister, SD Senator Casey Crabtree, SD Senator Joshua Klumb, and SD Representative Randy Gross, SD Representative Becky J. Drury			
2:00 pm	Greater Madison Area Chamber of Commerce Ribbon Cutting			
2:20 – 2:30 pm	Derrick Schiefelbein & Rick Geppert, SD DANR update on SD State Hemp Acres			
2:30 – 3:00 pm	Mandi Kerr, Global Hemp Association, presenting on "The Hemp V Trials"			
3:00 - 3:10 pm	Break or Q&A for Speaker			
3:10 - 3:20 pm	Chris Kinsel, US1 Logistics, brief report on "Hemp Trucking"			
3:20 – 3:50 pm	Fred Cawthon, President, Hemp Alliance of Tennessee "Hemp in the Auto Industry"			
3:50 - 4:00 pm	Break or Q&A for Speaker			
4:00 – 4:10 pm	Morris Beegle, President of WAFBA, We Are For Better Alternatives "In the Middle of every Difficulty lies Opportunity"			
4:10 – 4:40 pm	Corbett Hefner, Formation Ag "Hemp Cinderblock and Bast Fiber Products"			
4:40 – 5:00 pm	Andrew Bish, Bish Enterprises "Hemp Fiber and Grain Trends / Equipment"			
5:00 – 7:00 pm				

August 5th Agenda

Registration Desk Opens	
Lake County's First Hemp Field Tour	
Hempcrete Workshop Resumes	
John Peterson, Dakota Hemp & Derrick Dohmann, Horizon Hemp Seeds	
Lori Daytner, VP of Program Development, DON Processing	
Blake Burggraff, SD Organic Hemp Farmer	
Conference Finished – Thank you for Coming!	
5:00 pm Hempcrete Workshop Finished – Thank you for Participating!	

United States Department of Agriculture Agricultural Marketing Service National Organic Program Transition to Organic Partnership Program







Stengel Seed and Grain

Friday - August 25, 2023 10:00 am - 2:00 pm Lunch Provided

Welcome & Presentations

Doug Stengel

Hear the story of the Stengel Seed mission, growth, and value- added ag enterprise helping organic producers

Nate Powell-Palm

First generation farmer talks about transition to organic farming and growth from 100 - 1000 acres

United States Department of Agriculture Agricultural Marketing Service National Organic Program Transition to Organic Partnership Program



Tours will also be provided

14698 State Hwy 15 Milbank, SD 57252 *****

RSVP not required but preferred to office@stengelgrain.com or events@NPSAS.org 605-432-6030 or 605-380-3770

Proven Cover Crop Benefits

Orldwide, farmers are being challenged with a variety of issues, including growing populations, a changing climate and soil degradation, among many others. To combat these challenges, researchers are looking for solutions and have begun to focus their work on the viability of sustainable agriculture practices, like cover crops.

"One of the main ways to improve the sustainability of agriculture is to utilize cover crops," said Deepak Joshi, a recent Ph.D. graduate from South Dakota State University's Department of Agronomy, Horticulture and Plant Science.

A cover crop is a plant that is used primarily to slow erosion and improve soil health. Cover crops are planted in the short time period following a harvest and are "killed off" prior to the planting of the next cash crop.

"It is assumed that cover crops will improve soil health and soil carbon," Joshi added.

Joshi's research provided overview of conservation agriculture technology as strategies to minimize soil degradation, climate change challenges, and food insecurity issues in developing countries. It also investigated the impact of cover crops on soil organic carbon and greenhouse gas emissions in a corn cropping system through a meta-analysis of previous cover crop studies as well as through field experiment.

Cover crops

Experimental research on cover crops is widespread with over 61 peer-reviewed cover crop studies having been completed and digitally available through May 2022. The challenge—as Joshi points out—is that the studies do not always provide a clear answer on the benefits of cover crops.

"There are numerous studies conducted about cover crops, but it is unclear whether they increase or decrease soil carbon," Joshi said. "If you read through the published articles, some report an increase and others a decrease. The information provided was unclear."

For his own research, Joshi com-



Rye cover crops, pictured above, have proven to increase soil organic carbon, a measurable component of soil organic matter and a key element in determining soil quality. A higher soil organic carbon percentage indicates greater soil health.

bined all known cover crop studies (61) on corn cropping systems into one meta-analysis. It was found that cover crops increase the soil organic carbon by 7.3%—a significant amount.

Soil organic carbon is the measurable component of soil organic matter and is a key element in determining soil quality. A higher soil organic carbon percentage indicates greater soil health.

"Ultimately, cover crops are taking carbon dioxide from the atmosphere and stirring it into the soil," Joshi said. "That means cover crops can help improve the growing climate problem and also help improve soil health."

Joshi found that current corn fields with cover crops have a soil organic carbon (SOC) sequestration rate of .8 Mg. This means that if all U.S. corn fields used cover crops, 29.12 million Mg SOC could be sequestered annually, which equals 107 million metric tons of carbon dioxide. According to the Environmental Protection Agency, this is equivalent to the greenhouse gas emissions from nearly 247.5 million barrels of oil or 23.8 million

gasoline-powered vehicles driven for one year.

"From the two-year field experiment conducted, we found rye cover crop during growth stage reduced N2O emission while it increased during decomposition. However, when we combined both growth phases, cover crop and no cover crop treatment had similar emission. This means that cover crops have no effect on GHG emissions, instead it improves soil health by improving soil microorganisms, soil moisture and soil carbon," Joshi said.

"It will also ultimately increase the crop yield for the next harvest season as well," Joshi added.

The meta-analysis showed that adopting cover crops increased corn yield by 23%.

Cover crops have been a staple for many organic farms and it is increasingly taking on a more mainstream adoption for conventional farmers as well as more farmers gain a clearer understanding of the proven benefits.

SOURCE: South Dakota State University



Let's keep building a sustainable future together.

Join NPSAS or renew your membership today!

Growing nutrient dense food, using environmentally sound farming methods that support the long-term sustainability of human communities, soil, and water resources has been the focus of NPSAS for 40+ years. When we started, there were few others interested in our ideas, and markets for our products were hard to find. All that has changed. Your new membership or membership renewal will help us continue to build our community of support as we work to meet the increasing demand for knowledge and tools to build a more sustainable way of life.

Not sure of your membership status? Email info@NPSAS.org with questions

Worthern Plaine Sustainable Ar	Renew or join NPSAS		
Northern Plains Sustainable Ag	☐ Student \$40	☐ Family \$75	
EDUCATION/COMMUNITY/ENVIRONMENT	☐ Business \$300	☐ Lifetime \$1500	\$
Name:	<u> </u>		
arm/Business Name:	Optional: Please accept my generous gift of:		
•	□ \$35	□ \$50	
Address:	— □ \$100	□ \$150	
City: State: Zip:	□ \$1,000	☐ Other \$	\$
Phone:			
mail:	Designate my gift to go toward: □ Beginning farmer training □ General operating □ Farm Breeding Club support		
Please make checks payable to NPSAS , or donate with a credit card:			
□VISA □MasterCard Signature	9	☐ Matching gift for online	
Name on card Amount: \$	ence scholarships	giving programs/ year-end appeal	
Card number CVV		TOTAL	\$

Thanks for your continued support of NPSAS!

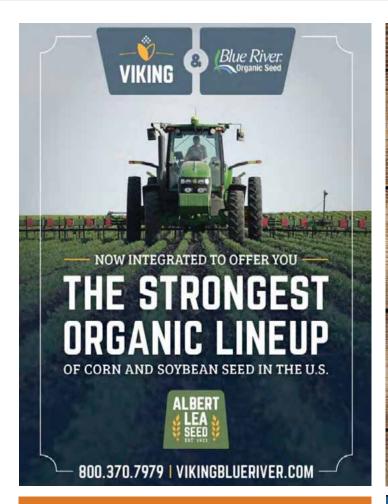
The NPSAS Board & Staff are committed to honoring and building on what the founders created and previous boards and staff nurtured. We will serve the mission of the organization to the highest standard to ensure NPSAS is here to serve for generations to come.



Return this section to: NPSAS • PO Box 444 • Frederick, SD 57441

Scan to start your NPSAS Membership Today!









Practical, reliable and friendly organic certification services

MOSAORGANIC.ORG | 844-637-2526





Doug & Anna Crabtree 2024 NPSAS Food and Farming Conference Keynote **Speakers**

It's hard to fathom starting a farm with nothing in today's day and age. That's what Doug and Anna Crabree have done with their own ag operation known as Vilicus Farms. The Crabrees will share their story of struggles and successes as first generation farmers. Nationally known organic, dryland crop farmers in Northern Hill County, Montana, the Crabrees grow a diverse array of organic heirloom and specialty crops. At Vilicus Farms the Crabtrees cropping practices focus on soil-building and carbon sequestration, pollinator friendly conservation tactics, and minimum disturbance tillage practices. With a 5-7 year crop rotation, 26% of managed land in permanent pollinator friendly conservation, and over 20 unique crops grown annually,

Vilicus Farms strives to promote diversity and resilience across its landscape. Anna and Doug are committed to championing organic agricultural land stewardship on a scale that matters, as well as developing a community of like-minded farmers who share their vision. Vilicus Farms launched a beginning



organic farmer apprenticeship program in 2013 to support the establishment of new farmers on the Northern Great Plains. Since 2009, Vilicus Farms has grown from a 1,280-acre organic farm to a 9,600-acre organic farming operation focused on cultivating a conservation-based ethic for sustainable food production while also training beginning farmers on Montana's Northern Great Plains.

SAVE THE DATE:

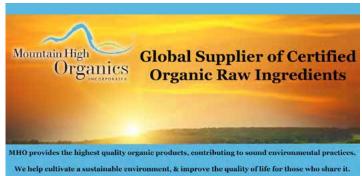
January 25-27, 2024 IN ABERDEEN, SD - 2024 FOOD & FARMING **CONFERENCE**



Insuring Organics in NORTH DAKOTA Located in Dunseith—Harvey—Maddock—Rugby Ph: 701-324-4500

We Are Your MPCI Organic Crop Specialists

We are equal opportunity providers



We source from farmers who have a personal connection to their crops;

therefore, creating value added products across all food industry channels.







BUILT ON FARMER

Relationships

We Buy Organic & **Conventional Non-GMO:**

- Oats
- Wheat
- Barley
- Rye
- **Triticale**
- Lentils
- Soybeans
- Flax



IT'S MORE THAN A PARTNERSHIP. IT'S OUR Promise.

grainmillers.com | 800.328.5188

NPSAS Buckwheat is Growing in Popularity

Success is growing for The Farm Breeder Network (FBN) in the form of buckwheat. The buckwheat variety Devyatka that the FBN has been testing for quality & taste the last seven years is gaining momentum.

"We're seeing it's biggest growth year yet." said Steve Zwinger, former NDSU organic researcher and current NPSAS board member. "It's exciting to see something this group started gain popularity and see it's potential."

In this 2023 growing season there are seven different fields across the NPSAS network growing Devyatka buckwheat, including four research sites and over 400 acres with three different organic farmers. The progress and results of these fields are being recorded and monitored. If a successful crop is harvested from most if not all of these fields, it will provide opportunities for further testing and availability of more seed for next year.

Buckwheat is an ancient grain that is growing in popularity because it's gluten-free. It is a late planted short season broadleaf crop that is adaptable to the Dakotas and is an important crop for organic farmers. Buckwheat also has a positive impact on a number of eco-system services including weed suppression, nutrient addition, erosion control, and tilth improvement. Buckwheat with its long flowering periods and abundant flowers provides excellent habitat for pollinators.

There are two types of buckwheat, determinant and indeterminate. The majority of buckwheat varieties are indeterminate, meaning they will continue to flower and set seed throughout the season until the crop is terminated. The NPSAS Devyatka buckwheat is a



NPSAS's devaytka buckwheat seed. Photo by Martin Goter

determinant variety that has an earlier, shorter flowering period along with earlier maturity.

The testing of this determinant buckwheat variety is helpful because it provides opportunities. "The possibilities of a successful determinate variety and its earlier maturity could help with later plantings or use in double cropping." said Zwinger

In addition to agronomic evaluation, information is being collected on the flavor of food products made using Devyatka. "Yes, we want seeds that NPSAS develops through the Farm Breeder Network to produce a hearty and bountiful crop, but ultimately, we really want it to taste good too." said Dr. Richard Horsley, NDSU Head of the Department of Plant Sciences and NPSAS Board member. "This variety was tested against seven other varieties for taste and baking capabilities. The top three varieties including the NPSAS Devyatka Buckwheat scored similarly. This is a great sign for the success of the seed and creating a

quality market for NPSAS members." Horsley added

The Devyatka buckwheat seed was acquired in 2012 from Ukrainian agricultural representatives who visited North Dakota to attend trade shows and learn how we manage crops. They provided NPSAS with one kilogram each of two of their favorite varieties, both of which were large seeded and determinant in their growth. Since then the seed has been continually increased and tested.

The Farm Breeder Network (Formally the Farm Breeder Club) is a committee of Northern Plains Sustainable Agricultural Society. It was designed for members to come together to ensure the was sustainability of organic and non-GMO seed, as these can be difficult to find. While that is still a primary goal of the committee, another is to bring together growers, processors, bakers, and end users to create quality flavorful lines of grain for NPSAS members to have access to good seed and good markets.

goes

Buckwheat Taste Test

Buckwheat Varieties	Conventional	Organic	<u>Overall</u>	Cooking Notes
Horizon	#2	#1	#1	Is harder to flip easily than other types. Breaks easier.
Experimental	#1	#2	#2	Easier to flip than Horizon without the worry of breaking. Average as far as cooking g
Devyatka	#3	#3	#3	Similar to Horizon
Koto	#4	#4	#4	Similar to Experimental
Koma	#5	#6	#5	Similar to Experimental
Manor	#6	#5	#6	Similar to Horizon
Springfield	#7	#7	#7	Firmer pancakes are created which are easier to flip without the worry of breaking.
Green Testa	#8	#8	#8	Seems to absorb water differently, which makes the batter thicker. Not easy to use



Join our family of growers who share our passion for cultivating goodness. We'd like you to grow with us.

Beans | Pulses | Grains | Flax



Discover the Delights of Cooking with Ancient Grains

Enhancing Nutrition, Flavor, and Sustainability in Your Food

Baking enthusiasts and health-conscious individuals are increasingly turning to ancient grains as a way to elevate their baking endeavors. These ancient grains, which have been cultivated for centuries, offer a myriad of benefits over their modern refined counterparts. From enhanced nutritional value to unique flavors and sustainable agriculture, incorporating ancient grains into your baking repertoire can be a rewarding and enriching experience.

1. Nutritional Value

One of the primary advantages of baking with ancient grains lies in their nutritional value. Compared to modern refined grains, ancient grains are less processed, retaining a higher proportion of their original nutrients. These grains are typically rich in fiber, protein, vitamins, minerals, and antioxidants. By including ancient grains in your baking, you can contribute to a more nutritious diet and enjoy the health benefits they offer.

2. Rich Flavor

Ancient grains possess a distinctive and robust flavor profile that can elevate the taste of your baked goods. Each grain imparts its own unique characteristics. For instance, spelt, amaranth, quinoa, and teff offer nutty or earthy notes, adding depth and complexity to your culinary creations. Exploring

the flavors of ancient grains can tantalize your taste buds and provide a gratifying culinary experi-

3. Gluten Alternatives

Many ancient grains are naturally gluten-free or have lower gluten content compared to modern wheat. This makes them excellent alternatives for individuals with gluten sensitivities or celiac disease. Grains like amaranth, quinoa, millet, and teff can be used to create delicious gluten-free baked goods, allowing those with dietary restrictions to savor the joys of freshly baked treats.

4. Variety and Diversity

Baking with ancient grains opens up a world of variety and diversity. These grains are available in various forms, including whole grains, flours, flakes, and puffs, offering versatility in baking applications. Experimenting with different ancient grains enables you to explore a wide range of flavors, textures, and baking techniques, infusing your creations with novelty and excitement.

5. Sustainable Agriculture

Supporting the cultivation and use of ancient grains promotes sustainable agriculture practices and biodiversity. Ancient grains often require fewer synthetic fertilizers, pesticides, and irrigation compared to modern hybridized grains. By incorporating these grains into your baking, you actively contribute to the preservation of traditional farming methods, protecting the environment, and fostering sustainable food systems.

6. Cultural Heritage

Using ancient grains provides a gateway to the cultural heritage and culinary traditions of various regions and cuisines. Many of these grains have been staple foods for centuries, carrying historical and cultural significance. By using ancient grains in your recipes, you can connect with the past, embrace diverse culinary legacies, and appreciate the stories and traditions associated with these grains.

While baking with ancient grains offers numerous benefits, it's important to note that they may require recipe adjustments due to their unique characteristics. Different gluten structures or moisture absorption rates may necessitate experimentation or the use of specially developed recipes. Be open to exploring and adapting your baking techniques to achieve the desired texture and structure in your baked goods.

Incorporating ancient grains into your cooking and baking endeavors allows you to enhance the nutritional value, flavors, and sustainability of your creations. Embrace the world of ancient grains and embark on a culinary journey that not only delights your taste buds but also nourishes your body and celebrates the richness of our culinary heritage.



Ancient Grain Salad



Instructions

- In a large mixing bowl, combine the cooked quinoa, farro, freekeh, and amaranth.
- Add the cucumbers, cherry tomatoes, red onion, parsley, mint, and feta cheese (if using)
- In a separate small bowl, whisk together the lemon juice, olive oil, salt, and pepper.
- Pour the dressing over the salad ingredients and toss well to combine.
- Adjust the seasoning to taste and let the salad sit for about 15 minutes to allow the flavors to
- Serve the ancient grain salad as a nutritious and flavorful side dish or as a light and refreshing main course.



Ingredients

- 1 cup cooked quinoa
- 1 cup cooked farro
- 1 cup cooked freekeh
- 1 cup cooked amaranth
- 1 cup chopped cucumbers
- 1 cup cherry tomatoes, halved
- 1/2 cup diced red onion
- 1/4 cup chopped fresh
- parsley
- 1/4 cup chopped fresh mint
- 1/4 cup crumbled feta cheese (optional)
- Juice of 1 lemon
- 3 tablespoons extra-virgin olive oil
- Salt and pepper to taste



Ingredients

- 1 1/2 cups spelt flour
- 1 teaspoon baking soda
- 1/2 teaspoon ground cinnamon
- 1/4 teaspoon salt
- 3 ripe bananas, mashed
- 1/2 cup coconut sugar or
- brown sugar
- 1/4 cup coconut oil, melted
- 1/4 cup plain Greek yogurt
- 2 large eggs
- 1 teaspoon vanilla extract
- 1/2 cup chopped walnuts or pecans (optional)

Spelt Banana Bread



- Preheat your oven to 350°F and grease a 9x5inch loaf pan.
- In a medium bowl, whisk together the spelt flour, baking soda, cinnamon, and salt.
- In a separate large bowl, combine the mashed bananas, coconut sugar, melted coconut oil, Greek yogurt, eggs, and vanilla extract. Mix well until all the ingredients are thoroughly combined.
- 4. Gradually add the dry ingredients to the banana mixture and stir until just combined. Be careful not to overmix.
- 5. If desired, fold in the chopped walnuts or
- Pour the batter into the prepared loaf pan and smooth the top with a spatula.
- Bake for approximately 50-60 minutes or until a toothpick inserted into the center of the bread comes out clean.
- Remove the bread from the oven and let it cool in the pan for about 10 minutes. Then transfer it to a wire rack to cool completely before slicing and serving.

Enjoy these delicious recipes that incorporate the goodness of ancient grains into your culinary repertoire!

Moving to Regenerative Organic Production

t Grand Meadow Regenerative near Hartford, SD, Blake Burggraff focuses on specialty crops and regenerative organic agriculture. As a fourth-generation farmer, he and his wife Sarah scratch out a living with 30 cows and less than 200 acres of cropland.

On August 5th Blake will be speaking in Winfred, SD on his journey of converting conventional farm ground to regenerative organic ground. His presentation will be from 11:00 - 12:00 p.m. at the Grand Opening of Complete Hemp Processing, the first hemp decortication processing plant to open since it became legal to grow hemp in South Dakota in 2021. As a biodynamic organic hemp farmer Blake will be presenting on "Lessons Learned in Transition to a Regenerative Organic System."

"You are really the expert in running your operation," Blake said. "Do not put your expertise down. You know how to manage your soil, equipment, and finances. There are others who are experts in cover crops, soil health and chemistry who provide helpful information. Experts tell us what should work, but the most important element is implementation. Each farmer is the expert in what they do, and they must trust themselves."

When he began farming on his own, he found things were not working financially despite all of his work. He could see that the biggest expense was chemical fertilizer and patented seeds. "It made little sense to kill stuff to grow stuff."

He searched for information to support his belief. "We should not be applying pesticides if we want to promote biology in the soil. That's why I'm taking this risk by transitioning to regenerative organic. I don't want to do tillage which depletes the moisture we have. I want to build a mulch of soil and promote diversity and break up the weed cycles."

He started looking for ways to promote nutrient cycling and sees that it is working. In looking at his fields, he could see some spots grew better than others. He identified pH levels as a



Blake Burggraff owner of Grand Meadow Regenerative near Hartford, SD in his field of hemp. - Courtesy Photo

concern. In some spots, the hemp is a foot to two feet taller when growing where a cow patty has cycled through the soil.

The soil pH level determines whether the soil is acidic or alkaline. Soil pH varies from around 3.5 (very acidic) to 8.5 (alkaline). A reading of 7.0 is neutral and the optimum for most plants is 6.5. Less than 7.0 is acid and over 7.0 is alkaline.

Blake said, "I have done some soil testing but don't have the money to do the soil health soil tests. Instead, I look for what is most important for me, which is the level of organic matter and the pH. Where plants grow well, the soil was supporting the plants. Where it's bad, it comes down to pH. In areas where the pH is over 8, plants and even some weeds don't grow well."

Blake is attempting to build a 10-year rotation. Through research and trial and error, he's finding what works. "We have made plenty of mistakes. We learn from each mistake to make changes to our system. I take a lot of photos on my phone to doc-

ument the changes and to share our successes and failures.

Blake said they try to maintain two different crops a year plus alfalfa. "We try to grow one crop that is a heavy feeder and one crop which is not that can be followed by a cover crop."

He said this year, "Cheatgrass choked my hemp crop out in certain areas. We started out with really hot weather, with 177 growing degrees days a week. That caused the cheat grass to come on strong and beat out the hemp. You can see every spot where a cow patty has cycled through the soil or places where manure has been applied. These areas are unaffected by the cheatgrass and look much healthier."

He's applied manure and built roots by planting crops like oats, sorghum sudan, diverse cover crop mixtures, and hemp to build the topsoil. Those measures are clearly working on the fields with better diversity and the longest rotation. It's the third year that some of his fields have been out of corn and bean rotation.

He stresses, "This would be impossible without my family's help. I farm next to my dad. We help each other out and share equipment. My uncle lives several miles away, and we use labor and equipment back and forth. I have the no-till drill, my dad has the silage chopper, my uncle has the combine and trucks. It is lots of working together and trading back and forth. This all wouldn't be possible without that."

"My family is supporting our transition to organic, just like they would support us if we were farming conventionally. My uncle helped to harvest my hemp. He has the feel for his combine and was able to move across the field very efficiently even though hemp is known for being difficult to combine. His expertise and years of experience are something you can't pay for. I'm very thankful for it."

Blake listened to a lot of speakers and YouTube videos before committing to these changes. People like Ray Archuleta and Gabe Brown provide great insight. It's taking that informa-



The canopy of the hemp on the ground that has been in regenerative management in the longest shades out a milk thistle plant. – Courtesy photo

tion and implementing it that makes a difference. It's a mental game to pull all the pieces together to make it work to try something new.

Grand Meadow Regenerative uses goats to manage ditches and lawns. For soil health purposes, the 14 moms and 24 babies graze an area and lay down a gorgeous mat over the soil surface which holds down moisture and weeds. The Burggraffs continue to make this part of the operation more resilient by hard culling and finding the best genetics.

Marketing is the biggest learning



Grazing goats are part of the regenerative program at Grand Meadow Regenerative.

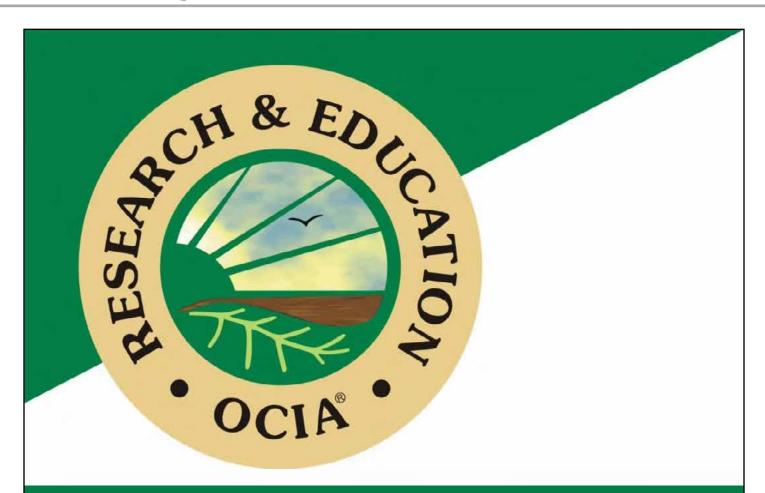
curve in dealing with all the specialty crops they now grow. He advises, "I've found the most effective way is to reach out and communicate with those in the business of specialty crops and cover crops. Word-of-mouth connections allow you to make deals that are not often known by many other people. Each contract must always include an 'act of God' clause, as you can really get in trouble if you don't have the bushels when the contract is due."

Another important lesson is to contract before you grow. Blake said, "If you don't have a signed contract, it's hard to turn a profit."

Blake's advice for transitioning to organic: "Gather research and learn from others. Trust that you know how to manage your operation as you add new systems of management."

He shared, "One of the biggest boneheaded moves I've made was following the recommendation from a seed company to plant seed only one-half inch deep. This was going into mellow, no-till soil. It took too long for us to get rain and the weeds got started sooner than the cover crop. Oftentimes you have to trust your expertise. An example of this is when we planted hemp at one inch deep instead of the recommended half to three-fourths. It could have crusted in the conventionally tilled ground, but the mellow, no-till soil allowed the small-seeded plant to push through on its way to the surface. We believed we should plant deeper, and we were really happy we did. In our operation, we invest in technology to get the best seed-to-soil contact and we have seen when we seed Monday, by God's grace the crop is emerging on Friday. We need to hit moisture to push the seed out of the ground. We trusted in our decision and found out what was right for our operation."

"In the end, you are going to pay for the seed or product, whether or not it works," Blake said. "Do what you know will work best with your system of management."



OCIA R&E Mentorship Program

Paid Mentor Opportunities for Organic Growers:

As a Core Partner in the USDA's Transition to Organic Partnership Program (TOPP), OCIA Research & Education is looking for organic growers in the Great Plains Region (NE, CO, KS, OK, ND, SD) to serve as mentors to farmers who are transitioning to organic.

Mentors need to be certified by any USDA-NOP certifier and in good standing OR have a minimum of 3 years experience in organic production. A commitment to 45 hours per 12-month cycle will include 2 on-farm visits, 3 touch points during the growing season, and mentor trainings. Mentors will be provided a \$3,000 yearly stipend for their participation and travel.

If you are interested in being contacted further regarding a mentor training for this exciting new program, please email at info@ocia.org.

Thank you,

Angie Tunink

Executive Director OCIA Research & Education, Inc.

United States Department of Agriculture Agricultural Marketing Service National Organic Program Transition to Organic Partnership Program



Alfalfa Can Play Valuable Role in Transitioning to Organic Farming



Transitioning to organic farming requires careful consideration of various factors, including soil fertility, weed management, and the availability of organic inputs. Prepare for the idea that you're going to make mistakes. But know that if you include good use of alfalfa in your operation, you'll likely have far fewer mistakes. Alfalfa (Medicago sativa) emerges as a valuable asset due to its numerous benefits for organic farming systems. It's also a crucial crop in transitioning to organic agriculture and it can contribute to the financial success of an organic operation. From soil improvement and weed suppression to forage production and market demand, alfalfa offers a range of advantages that make it a profitable choice for organic farmers.

Charlie Johnson, an organic farmer with Johnson Farms outside of Madison, SD said, "Alfalfa comprises a third of our tillable acres and is the anchor of our 6-year rotation." The Johnson family has been certified organic since 1976 and is a great resource for transitioning farmers. They host an informative field day every year that is a great resource for anyone interested in transitioning to organic production. This year it will take place on July 20, 2023 starting with 8:30 registration at St. Peter on the Prairie Church near their farm.

1. Soil Improvement through Nitrogen Fixation and Organic **Matter Addition:**

One of the primary benefits of incorporating alfalfa into organic farming systems is its ability to improve soil fertility naturally. Alfalfa is a leguminous plant that forms a symbiotic relationship with nitrogen-fixing bacteria in its root nodules. This symbiosis allows alfalfa to fix atmospheric nitrogen, converting it into a plant-available form. As a result, the crop enriches the soil with nitrogen, reducing the need for synthetic nitrogen fertilizers.

Add to that, when alfalfa is grown as a cover crop or green manure, it contributes to organic matter addition in the soil. When the plants reach maturity, they can be cut and incorporated into the soil, adding organic carbon and improving soil structure, water-holding capacity, and nutrient content. This organic matter

boosts soil fertility and enhances its longterm sustainability.

2. Weed Suppression and **Reduced Reliance on Herbicides:**

Alfalfa's dense and vigorous growth habit provides effective weed suppression, which is crucial for organic farmers. The canopy formed by alfalfa shades the ground, reducing sunlight availability for weed seed germination and inhibiting weed growth. By growing alfalfa, organic farmers can significantly reduce the reliance on synthetic herbicides, aligning with organic principles and minimizing environmental impacts.

When asked about the benefits of alfalfa in their operation, Johnson added, "Alfalfa is a big part of our in-house herbicide program helping to significantly cut down on our weeds. It plays a major role in our fertility needs."

3. Biodiversity Promotion and **Pollinator Support:**

Alfalfa's beautiful purple flowers not only add aesthetic value but also attract a diverse array of beneficial insects and pollinators. Including alfalfa in organic farming systems promotes biodiversity on the farm, as it serves as a valuable food and habitat source for bees, butterflies, and other pollinators. Enhancing biodiversity contributes to ecological balance, natural pest control, and the overall health of the farm ecosystem.

4. Forage Production and **Livestock Feed:**

Alfalfa is widely recognized as a high-quality forage crop with exceptional nutritional value. Its high protein content, digestibility, and nutrient profile make it an ideal choice for livestock feed. Organic farmers can capitalize on alfalfa's value by cultivating it as a primary feed source for their animals, meeting the organic standards for animal nutrition and welfare.

The demand for organic alfalfa as livestock feed has been steadily increasing due to the growing consumer preference for organic animal products. Organic dairy, beef, and other livestock operations require a consistent supply of organic forage, and alfalfa can provide

a reliable source of nutritious feed, contributing to the profitability of an organic

5. Market Demand and Profit Potential:

The market demand for organic alfalfa continues to expand, presenting organic farmers with lucrative opportunities. As the demand for organic meat, dairy, and poultry products rises, organic livestock producers seek reliable sources of organic forage to meet their animals' nutritional needs. This demand creates a strong market for organic alfalfa, ensuring a consistent and profitable outlet for farmers.

Alfalfa offers additional income streams beyond its use as livestock feed. Organic alfalfa can be processed into various value-added products, such as alfalfa pellets, which are used as animal feed supplements. These processed forms of alfalfa can fetch higher prices in the market and diversify the revenue potential for organic farmers.

Additionally, organic alfalfa can be marketed directly to organic food and livestock companies, which often prioritize sourcing organic inputs locally. Developing strong relationships with organic buyers can lead to long-term contracts and premium prices for alfalfa, further enhancing the profitability of organic operations.

In the journey towards organic farming, alfalfa emerges as a valuable asset that contributes to soil improvement, weed control, biodiversity promotion, and livestock feed production. Its ability to fix atmospheric nitrogen, add organic matter to the soil, suppress weeds naturally, and attract beneficial insects and pollinators make it a cornerstone of organic farming systems. Moreover, the market demand for organic alfalfa provides organic farmers with a profitable avenue to generate income. By cultivating alfalfa and exploring value-added opportunities, organic operations can not only meet the organic standards but also thrive financially. Harnessing the many advantages of alfalfa enables farmers to transition to organic agriculture successfully while reaping the rewards of sustainable and profitable farming practices.

66

Agriculture is our wisest pursuit, because it will in the end contribute most to real wealth, good morals, and happiness.

THOMAS JEFFERSON





Food and Farming Conference Call for Content & Speakers

Each year the Food and Farming Conference gathers like-minded farmers, ranchers, growers large and small, as well as consumers that work toward the best organic, regenerative, and sustainable agricultural practices in the region. In addition, the businesses that support those endeavors also attend to share how they can best serve the needs of those working toward healthier and more environmentally friendly practices. The NPSAS conference planning committee is looking for speakers for the 2024 event to be held in Aberdeen, SD at the Ramkota on January 25 - 27.

Conference attendees look for applicable content that can be used to improve their farm and ranch operations. The content should offer insight into the issues and trends that will improve overall production and fiscal decisions of a successful farm operation. If you or someone you know is someone that can speak to the content that might include but is not limited to the following:

- Unique soil health improvements
- Research trials and results



Do you have an idea for a great Q & A panel like this organic farmer panel from 2023 Conference? - Photo by Krysti Mikkonen

- Food production practices that improve yield
- New and unique products innovations
- Processes and procedures of a how-to endeavor to success, How to bring a new value-added ag product to market.
- Weed control solutions and

- practices that demonstrated successfully
- Family business relationship solutions
- Agricultural problem-solving solutions
- Animal health innovations
- Unique grazing practices
- Pest control answers and practices
- Transition to organic production stories &/or solutions
- Labor solutions
- Passing down the farm

If you have content to share that fits a topic you feel would resonate with NPSAS Food and Farming conference attendees, send an email to events@npsas.org. If you have content that you would like to share at this conference Send an email to the same address with your name, content idea, why you believe this audience is right for your presentation, and the best format for presenting (45-minute workshop, Q & A Panel, Open Forum discussion, ect.) by August 1, 2023.



Are you a speaker or have an idea for a speaker and/or content that can fill a room at the 2024 NPSAS Food & Farming Conference?



NPSAS Equipment For Sale

he following pieces of equipment are for sale. Interested parties have until Aug 1 at 8:00 am to submit a bid for any of the following pieces of equipment to director@npsas.org. Bids will be presented to the board at the board for approval. Questions? Call Krysti Mikkonen at 605-380-3770.

Allis Chalmers

All crop pull harvester (60 inch head) with pickup header and optional 4 bat reel (not put on) included, Allis Chalmers engine. Missing reel belt and drive chain.





Push Planter

Simulates planting technique of larger ALMACO planters by using same precision metering cone Cone makes one completed revolution per plot length Standard 3" diameter seed cup is well-suited for planting large to medium-sized seeds Other seed cups available.



2011 Bumper Hitch Trailer - 20 ft







HELP WANTED

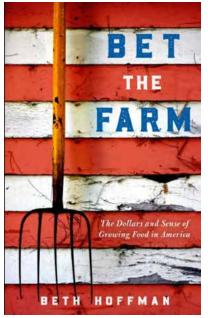
Are you looking for a career in the Ag industry?

Check us out. We are a small biological company, located in northwest Iowa. We make and manufacture cutting-edge crop and animal products. We are seeking a highly motivated and energetic person to join our team, and the possibilities to grow with us are endless. We will pay competitive wages to the right person. Positive attitude and motivation are just some of the qualities we are looking for. If you think you may be the person for this position, please give us a call at 605-370-2249! Housing is available if needed.



Great Reads for Better Farming

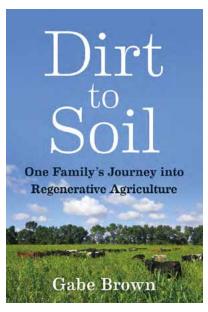
2023 Conference Speakers David Montgomery and Anne Biklé



Bet the Farm by Beth Hoffman

"Bet the Farm" is a captivating and inspiring novel that follows Sarah Montgomery, a determined young woman fighting to save her family's struggling farm from foreclosure. The author's vivid prose brings the rural setting to life, while well-developed characters and a strong sense of community add depth to the narrative. Though pacing can be uneven at times, the book offers a thought-provoking

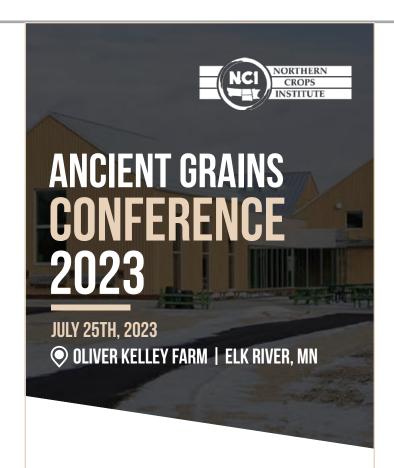
exploration of resilience and the pursuit of one's dreams. Overall, "Bet the Farm" is a commendable debut that will resonate with readers seeking stories of courage and the indomitable human spirit.



Dirt to Soil by Gabe Brown

In "Dirt to Soil," Gabe Brown offers a powerful call to action for regenerative agriculture. With a compelling blend of personal experiences and scientific insights, Brown highlights the detrimental impact of conventional farming practices on soil health and biodiversity. He presents practical solutions and guides readers through implementing regenerative techniques, emphasizing the im-

portance of observing nature and shifting our mindset as stewards of the land. This inspiring book provides hope, motivation, and a roadmap for healing our planet through regenerative practices.



ABOUT THE CONFERENCE

The Ancient Grains Conference aims to provide an educational and promotional setting to explore the characteristics and utilization of Ancient Grains. This year's theme is Growing Into Our Future.

Join us as we hear from speakers on topics including: the state of the ancient grains movement, the value chain, nutrition and more! There will also be a hands-on baking experience.

REGISTRATION

ANCIENT GRAINS CONFERENCE CON

PRSRTD STD US POSTAGE PAID



CHANGE SERVICE REQUESTED







Phone: 763-537-6639 **Fax:** 763-537-8353

E-mail: truax3@qwestoffice.net

www.truaxcomp.com

