



Fresh Whole-Grain Spring Wheat and 1874 Turkey Red Heritage Wheat flours grown in Scott, LeSueur and Mower Counties.

My farm uses no-till agriculture and cover crops to encourage ecosystem health. My mission is to inspire human flourishing through agriculture.









Quick Biography

- Farmer and Entrepreneur
- Started Aestiv LLC Consulting in 2019
- Board Member and former Vice President of the Newly Formed Perennial Promise Growers Cooperative
- Collaborating with the \$10M
 Kernza CAP Grant funded by the USDA, Worked on Policy for Continuous Living Cover Crops
- Steering Committee of the Artisan Grain Collaborative (AGC)





Farm Quick Overview

- Sell to bakeries, schools, Baker's Field Flour & Bread and Co-ops around the state.
- Personal background in agriculture in Central Kansas, plus 10+ years in academic and trade publishing industry furthered interest in product and market development.
- Family: Three children identical twins Grace and Lucia (14) and Eva (10).
- Recent Media: Kansas Farmer, City Pages, Hillsboro Star Journal MPR radio interview (2012 & 2017), Mankato Free Press, KEYC and PBS TV.

Quick (hoped for) Takeaways

I want you to come away from this talk with these things:

- A bit of agricultural political, cultural and scientific history how we got here.
- A brief introduction to the entrepreneurial, social and political enterprise that I'm calling the Agricultural Imagination and how it relates to Market Development
- An example of a scientific agricultural response to a changing climate: Continuous Living Cover (CLC) Kernza, Winter Camelina and Others
- An overview of Perennial Promise Growers Cooperative and Market Development Activities occurring around Kernza and Continuous Living Cover Crops such as Camelina

Farm Quick Overview

- Market and Entrepreneurial Development is key focus. Seeking to develop markets for local, handmade and value-added products. Baking Ambassadors Program. St. Peter Food Co-op Has been a crucial partner in developing my market and customers.
- Systems Orientation example using rye cover crop to produce no-till organic soybeans. Using experiments to get to best practice.
- Started at 32 Acres, farm and custom and contract farm a varying number of acres in a four county radius.
- Certified organic with MOSA since 2010.
- Started selling to the St. Peter Food Co-op in 2016. Sell Heritage Turkey Red and Hard Red Spring Wheat plus Rye at St. Peter Food Co-op. Only grower of Turkey Red Winter Wheat in Minnesota.

Steps in Product Development and a vision of an Agricultural Imagination

- Reflection: What does society need? What are the hopes and needs of the land, ecosystem and people?
- Concept ----->>> Who is the customer and what do they need/want? What problem are we attempting to solve?
- Testing and iteration. Try to fail! Improve the product with failure.
- Keep on Testing with improved product, talk to the people most invested in the product, the core audience.
- Link all points in the supply chain farmers, researchers, customers, distributors, marketing, salespeople and policy environment, trade and professional associations.



PLACES TO INTERVENE IN A SYSTEM (Meadows 1999)

(in increasing order of effectiveness)

- 12. Constants, parameters, numbers (such as subsidies, taxes, standards).
- 11. The sizes of buffers and other stabilizing stocks, relative to their flows.
- 10. The structure of material stocks and flows (such as transport networks, population age structures).
- 9. The lengths of delays, relative to the rate of system change.
- 8. The strength of negative feedback loops, relative to the impacts they are trying to correct against.
- 7. The gain around driving positive feedback loops.
- 6. The structure of information flows (who does and does not have access to information).
- 5. The rules of the system (such as incentives, punishments, constraints).
- 4. The power to add, change, evolve, or self-organize system structure.
- 3. The goals of the system.
- 2. The mindset or paradigm out of which the system its goals, structure, rules, delays, parameters
- arises.
- 1. The power to transcend paradigms.

Online Store, Bakeries, Retail & Breweries



























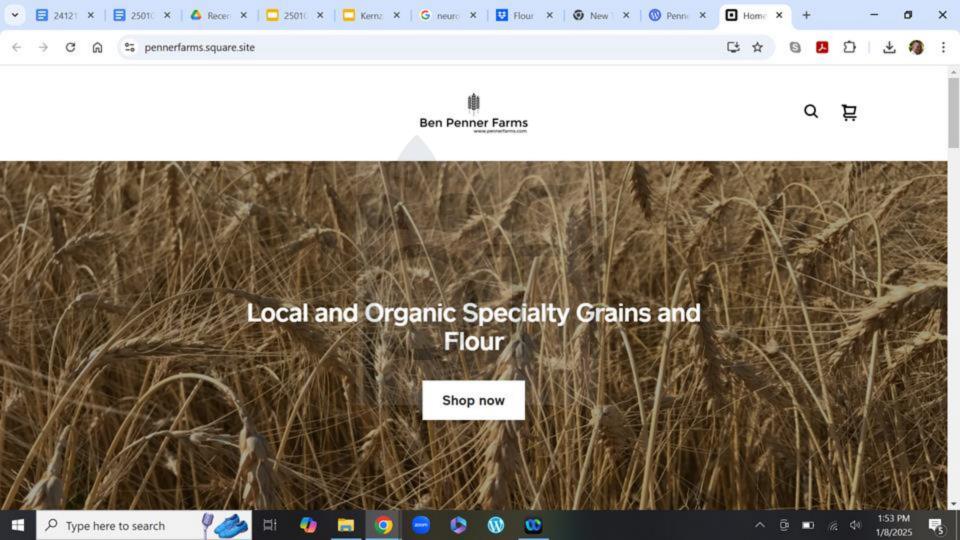














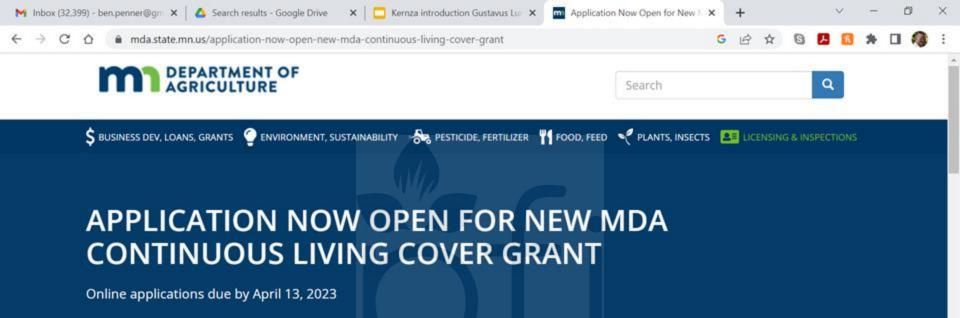












Home > Application Now Open for New MDA Continuous Living Cover Grant

March 13, 2023

The Minnesota Department of Agriculture (MDA) is now accepting applications for a new grant to develop enterprises, supply chains, and markets for continuous living cover crops and cropping systems in the early stage of commercial development.

Continuous living cover (CLC) refers to agricultural systems in which there are living plants and roots in the ground throughout the entire year. This can take many forms, from winter cover crops sown between summer annuals to agroforestry practices,







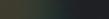








































Founded in 2019, Aestiv LLC exists to discover, accelerate, develop and promote entrepreneurial, research and market-based opportunities for Midwestern wheat and small grain farmers and the small grain product value chain, to engage climate change and inspire human flourishing through agriculture. Current clients include the University of Minnesota and Great River Greening. Beginning work with Kernza and Winter Camelina













Winter Camelina in Nicollet County

MISSION STATEMENT

The Perennial Promise Grower's Cooperative (PPGC) will provide direction and assistance to farmers interested in growing and marketing Kernza.

- Provide planting, growing, harvesting, and marketing expertise
- Provide logistical and processing networks, services and expertise for scaling-up production of kernza

Work in the future to commercialize other Continuous Living Cover crops such as Winter camelina, Pennycress, and similar Forever Green initiative crops.

PPGC will work to commercialize ecosystem services provided by these cropping systems

SETTING THE STAGE: POLICY



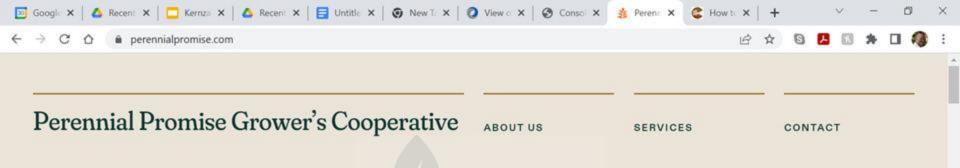
- In 2024, Continuous Living Cover Market
 Development Grants have been launched. I
 just advocated for an increase in 2024
 and beyond for this program, with an
 annual \$1 Million fund plus a \$10
 Million one time allocation over a short
 period of years
- Met with MN Representatives and Senatators in Washington DC as a cohort of 175 non-profits advocating for clean water, and a clean water Farm Bill
- There is a palpable hunger for solutions to climate and environmental issues through agriculture. We're hoping to see a request to match Minnesota's contribution to Market Development













We envision a landscape where perennial grains are abundant.



