



2021 UMN Forever Green Kernza®

Forever Green EECO Implementation Program

Introduction

This program will support the commercial success and environmental benefits of Kernza® in Minnesota. Kernza is one of over a dozen new perennial and winter annual cropping systems being developed by the University of Minnesota's Forever Green Initiative. These crops are intended to offer new economic opportunities to growers, new sustainable ingredients to industry, and critical ecosystem services to society.

The program includes financial and in-field technical support for growers, as well as capacity-building resources for Kernza partners around the State. Initial implementation activities will focus within three areas of Minnesota that have vulnerable groundwater—southeast, southwest and the Central Sands—which the program calls Economic and Environmental Clusters of Opportunity, or EECOs.

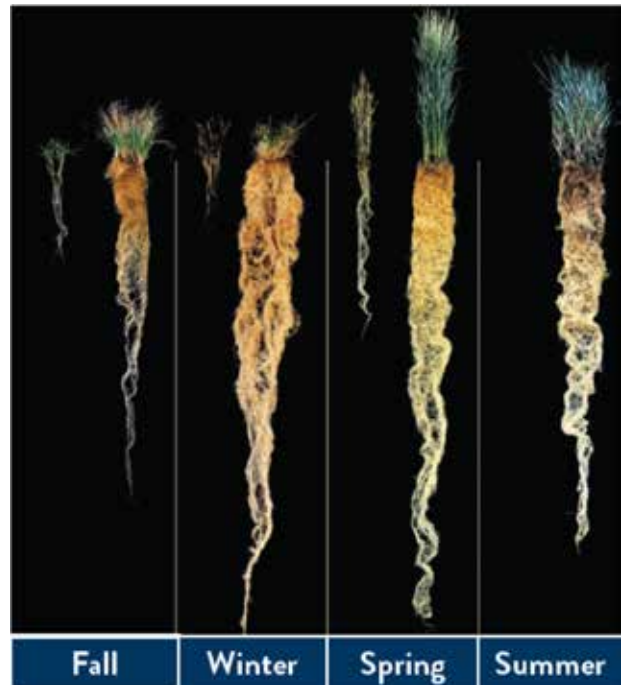
This new program for 2021 is offered in partnership by the University of Minnesota (UMN) Forever Green Initiative and the Minnesota Department of Agriculture (MDA). It is a pilot program attempting to develop a model that can be used to support the launch of the many continuous living cover crops and cropping systems being developed by the UMN Forever Green Initiative.

What is Kernza®?

Kernza® perennial grain:

- is the first commercially-viable perennial grain in the United States.
- has a long, dense root system that can greatly reduce nitrate-nitrogen leaching and deliver other environmental benefits to soil, water and climate.
- is one of 13 crops being developed by the UMN Forever Green Initiative to offer new economic opportunities and environmental benefits.
- is a trademark name owned by The Land Institute (TLI) in Salina, Kansas applying to products made from improved varieties of intermediate wheatgrass.

End users from local breweries and distilleries to international food companies are expressing interest in Kernza to meet consumer demands for sustainable and innovative food products.



The root structure of wheat (left) and Kernza perennial grain (right) throughout the four seasons. (Photo courtesy of The Land Institute)

All Kernza growers must be licensed by TLI. UMN and TLI are working together closely on Kernza research and commercialization in Minnesota and nationally. How do you grow Kernza®?

In Minnesota, Kernza is planted in late summer (mid-August to early September) and is usually harvested one year later (early to mid-August). Currently Kernza produces a commercially-viable grain harvest for at least two and sometimes three years. Kernza also produces a high volume of forage and UMN is strongly promoting Kernza as a dual-use crop for grain and forage. Kernza is still in an 'early adopter' phase, meaning best practices for growing, harvesting, and post-harvest handling are still developing, as are supply chains and markets. Resources for growers including a grower guide, recorded presentations and grower calls, and more are available at <http://bit.ly/Kernza-Grower-Resources>.



Eligible locations

The pilot program targets three areas of Minnesota for expanded Kernza production, including the following counties:

Southeast EECO: Dakota, Goodhue, Wabasha, Winona, Houston, Fillmore, Olmsted, Mower, Freeborn, Waseca, Steele, Dodge, Rice, Le Seur, or Nicollet Counties

Southwest EECO: Nobles, Murray, Lyon, Rock, Pipestone, Lincoln, Yellow Medicine, Lac qui Parle, or Big Stone Counties

Central EECO: Stearns, Todd, Wadena, Hubbard, Cass, Crow Wing, Morrison, Benton, Sherburne, Mille Lacs, or Isanti Counties

Growers near but outside the boundaries of these counties will be evaluated on a case-by-case basis.

Top priority will be given to commercial row crop acres located in Drinking Water Source Management Areas (DWSMAs) or Wellhead Protection Areas (WHPAs). To see whether you farm in a DWSMA or WHPA, enter your address in the following map: <http://bit.ly/MN-DWSMA-map>.

Growers located in targeted counties but not on DWSMAs or WHPAs will still be eligible, but enrolling acres within DWSMA and WHPA remain the top priority.

Ecosystem service and risk-sharing payments for growers in the Implementation Program

The Forever Green EECO Implementation Program includes a two-year payment program for enrolled growers including:

- **Ecosystem service payments ranging from \$25-50 per acre**, based on assessed risk of nitrate-nitrogen leaching, as modeled by the Nutrient Tracking Tool. Kernza acres on DWSMAs will receive a 25% premium on their ecosystem service payments
- **Economic risk payments up to \$175 per acre**, to be made in the event of on-farm or market performance that results in gross revenues below the cost of production. Cost of production will be based on a standardized enterprise budget using publicly-available county-specific average land rental rates

Further details on the rationale for these ecosystem service and economic risk payments can be discussed with interested and enrolled growers upon request.

Enrolled growers will need to comply with program requirements and technical production standards to remain eligible for ecosystem service and economic risk mitigation payments as described above.



Technical and financial assistance

Technical Assistance (TA) including support including grower-to-grower TA and support from a UMN Agronomy TA Specialist will be provided to enrolled growers, as well as written and recorded resources. Planting specifications must be followed to receive financial assistance, and field verification and certification by UMN technical representative is required. **Growers will need to sign an agreement and meet technical criteria in order to receive financial support.** Non-enrolled Kernza growers may access technical assistance support, but enrolled Kernza growers will be given priority. Modest additional support is available through the program for mobile grain drying units, grain testing services, targeted market research, and remote and in-person events.



How do I enroll in the UMN Forever Green EECO Implementation Program?

Only registered Kernza growers will be eligible to enroll. Kernza stands will be eligible for program enrollment for each stand's first three years of production. Existing plantings will be eligible. Note that Kernza seed is still limited in 2021, markets are still in their early phase of development, and licensing guidelines remain strict. The first step is to apply to be a Kernza grower with TLI at <http://bit.ly/2021KernzaGrowerApp>



Kernza grower vetting and licensing priorities, this flyer, and next steps for eligible growers to enroll in the Forever Green EECO Implementation Program are available on

www.kernza.org

www.forevergreen.umn.edu

DISCLAIMER: This pilot program is intended to share risk with early-adopter growers and deliver technical assistance, but enrolled growers will ultimately be responsible for the planting, management, harvest, and marketing of their Kernza. UMN, The Land Institute, and MDA are not Kernza buyers. Kernza presents a new opportunity, but best management practices, supply chains, and markets are still developing.

Questions about 2021 Kernza Implementation?

Growers interested to talk with other growers about production and marketing: Carmen Fernholz at 320-212-3008 or fernholz001@gmail.com

Questions about how to grow Kernza: Frank Forcella, UMN Kernza Agronomy Technical Assistance Specialist, at 320-292-9558 or forcellafrank@gmail.com

Questions about the Forever Green EECO Implementation Program and how to enroll: Colin Cureton, UMN Forever Green Forever Green Supply Chain Development Specialist, at 612-750-4967 or cure0012@umn.edu

For more information, the latest news, and more info on Kernza, visit kernza.org.

