

Perennial Grain Crop - Kernza™ - Connects Local Farmers and Brewers in Northfield

By Alan Kraus

Conservation Program Manager, Cannon River Watershed Partnership (CRWP)

One downside of our current production of grain crops such as corn, soybeans, wheat, oats, and barley is that these crops are *annual* crops, meaning that they need to be planted each year. This also means that many of the fields where annual grain crops are grown will spend at least some time during the year with no living plants covering the soil surface with vegetation and holding the soil in place with roots - protecting the soil from water and wind erosion. According to researchers, a new *perennial* grain crop trade named Kernza™ could solve those problems and provide grain for food use and forage for livestock while also keeping the soil covered year round.

In September 2018, two local farmers planted Kernza™ on their farms. Kernza™ is the registered tradename for intermediate wheatgrass (scientific name *Thinopyrum intermedium*), that was developed by The Land Institute located in Salina, Kansas. Despite the common name, it is not a species of wheat but rather a grass species related to wheat. The grain has a sweet, nutty flavor making it a good fit for cereals, snacks and brewing. The kernel is smaller than wheat and has more bran and fiber, but fewer carbohydrates. Kernza™ also produces vegetative forage (biomass) for livestock, and because it's a perennial it regrows year after year without having to plant new seeds annually. It also provides year-round soil coverage, reducing erosion. Through a Minnesota Department of Agriculture Sustainable Agriculture Demonstration Grant, the Cannon River Watershed Partnership (CRWP) and the University of Minnesota are partnering with Dan Honken in Rice County and Kaleb Anderson in Goodhue County to grow Kernza™ and study how grazing the biomass of Kernza™ in the fall will affect the next year's grain production of this perennial crop. Information from this 3-year study will help farmers learn about the financial benefits available to them from the grain and forage production of Kernza™.

In addition to local farmers growing Kernza™, local brewers have begun working on creating new beers with Kernza™. With help from a grant from the clothing brand Patagonia, CRWP is partnering with Imminent Brewing and the Milltown Mashers homebrewing club in Northfield to create a Kernza™ beer. On Saturday November 2nd homebrewers spent the afternoon on Imminent Brewing's patio experimenting with brewing batches of Kernza™ in varying percentages of the total grain mix in the mash. The resulting beers from this effort will be taste tested at Immiemnt Brewing's monthly Conversations On the Wonders of Science (C.O.W.S. - a community lectures organized by Carleton College) on December 10th beginning at 6:00 PM. This event is open to the public and will certainly be fun and informative. Imminent Brewing will brew a large batch of the winning recipe and make it available to the public sometime in February 2020.



Kernza™ at harvest Kaleb Anderson Farm Goodhue County. August 2019: Photo CRWP.



Cattle grazing Kernza™ biomass Kaleb Anderson Farm Goodhue County. October 2019. Photo: Kaleb Anderson

Kernza™ grain harvested at Kaleb Anderson Farm Goodhue County. August 2019. Photo: CRWP

