



Fourth International Kernza Conference Madison, Wisconsin, USA - 2019



Sunday June 30th

Location: Memorial Union Terrace, on the Mendota Lake shore (800 Langdon St, Madison, WI)

6-9 pm - Welcome reception outside at the Terraces – join us for pizza and drinks

Monday July 1st

Location: Pyle Center (702 Langdon St, Madison, WI) Room 313

7:30 am – Registration starts

8:00 am – **Welcome remarks.** Bill Barker, CALS Dean for Research, University of Wisconsin – Madison; Fred Iutzi, President, The Land Institute

8:30-10:15 am **Oral session 1: Kernza breeding, genetics, genomics.**

Chair: Lee De Haan, The Land Institute.

8:30 - Prabin Bajgain, University of Minnesota: Minnesota Kernza breeding program recap and plans for variety releases (25')

8:55 - Kayla Altendorf, University of Minnesota: NAM population preliminary results (15')

9:10 - Jared Crain, Kansas State University: Paternity testing with GBS, Sequencing status and plans to "finish", Multilocation Genomic selection (15')

9:25 - Steve Larson, USDA-ARS, Utah: Kernza Allegro data and future plans (10')

9:35 - Lee DeHaan, The Land Institute: Setting priorities for breeding and interfacing with other disciplines (20')

9:55 – Bill Tracy, University of Wisconsin-Madison: Synthesis and discussion questions. What have we learned and what are the next steps?

10:20-10:45 am Coffee break

10:45-12:30 am **Oral session 2: Kernza ecosystem services.**

Chair: Jake Jungers, University of Minnesota

10:45 - Tim Crews, The Land Institute: Ecosystem services of Kernza-legumes polycultures (15')

11:00 - Cynthia Bartel, Cornell University: Opportunities for Intermediate wheatgrass adoption in Upstate New York (15')

11:15 - Gabriel de Oliveira, University of Kansas: Carbon and water relations (15')

11:30 - Suzane Wiesner, USDA-DFRC: Kernza-legume carbon balance (5')

11:35 - Manbir Rakkar, University of Minnesota: Kernza soil health benefits (5')

11:40 - Galen Bergquist, University of Minnesota: Kernza carbon balance (5')

11:45 - Evelyn Reilly, University of Minnesota: Kernza water quality services (5')

11:50 – Alison Duff, DFRC-USDA: Synthesis and discussion questions: What have we learned and what are the next steps?

12:30-1:30 pm Lunch

1:30-3:30 pm Oral session 3: Kernza agronomic management.

Chair: Valentin Picasso, University of Wisconsin – Madison

1:30 - Valentin Picasso, University of Wisconsin-Madison: Optimizing forage and grain value of Kernza in polycultures (15')

1:45 - Brandon Schlautman, The Land Institute: Breeding legumes for intercropping with Kernza (10')

1:55 - Jake Jungers, University of Minnesota: Kernza multi-site yield components and harvest timing (15')

2:10 - Michelle Dobbratz, University of Minnesota: Tillering and recruitment (5')

2:15 - Eugene Philip Law, Cornell University: Kernza stands renovation (15')

2:30 - Joseph Zimbric, University of Wisconsin-Madison: Kernza weed suppression (10')

2:40 - Andrea Baske, University of Nebraska: Responses to Nitrogen fertilization in Kernza multisite study (10')

2:50 – Kathryn Turner, The Land Institute: Disease management in Kernza (10')

3:00 – Sean Conley, University of Wisconsin-Madison: Synthesis and discussion questions: What have we learned and what are the next steps?

3:30-4:00 pm Coffee break

4:00-5:00 pm Oral session 4: Kernza international research.

Chair: Anna Westerbergh, Swedish Agricultural University (SLU)

4:00 - Anna Westerbergh, SLU-Sweden: Perennial grains research in Sweden

4:15 - Sandra Wayman, Cornell University: Survey of farmers perspectives on perennial grains in France and US

4:30 - Andres Locatelli, UDELAR-Uruguay: Adaptation of Kernza to temperate regions

4:35 - Oksana Sukhomud, Uman National University-Ukraine: Growth and development of Kernza in the Right-Bank Forest-Steppe of Ukraine

4:40 – Lee DeHaan, The Land Institute: Other international updates on perennial grains

4:45 – Anna Sneider, University of Wisconsin – Madison: Synthesis and discussion questions: What have we learned and what are the next steps?

5:00-6:30 pm Networking time at Memorial Union Terrace

Optional paddling (kayak and canoeing) in the Mendota Lake

6:30-7:00 pm – **Poster session with tasting of Kernza beer from Driftless Brewery, WI** (Pyle Center, Alumni Lounge)

7:00-8:00 pm - **Dinner** (Pyle Center, Alumni Lounge)

8:00-8:30 pm – **Drinks, songs, talent show** (Pyle Center, Alumni Lounge)

8:30 pm move out of Pyle Center, optional networking at Memorial Union Terrace

Tuesday July 2nd

Field trip – Buses leave from Pyle Center (702 Langdon St, Madison, WI)

7:00 am – **Optional visit to UW Arboretum for nature/birding outing** (bus leaves 7 am from Pyle Center, space for first 50 interested attendees)

8:00 am - **Leave Pyle Center by bus** (buses leave 8 am from Pyle Center)
Coffee & Kernza muffins from Madison Sourdough served on the bus.

8:45-9:45 am – **John and Dorothy Priske Farm** – Visit the first perennial grain polyculture commercial field: organic Kernza-clover production and cattle grazing
(W1901 State Road 16, Fall River, WI 53932)

9:45-10:15 am - **Bus trip to UW Arlington Agricultural Research Station**
(N695 Hopkins Rd, Arlington, WI 53911)

10:15-11:15 am – **UW Arlington ARS Research plots Field Tour**

- Kernza-legumes polyculture experiment (AK2)
- Roots display (AK1)
- Planting date and intercropping experiment (AK5)
- Kernza-alfalfa intercropping experiment (AA1)
- Kernza population and “variety” trial (AK7)
- Other promising perennial grains (Silphium and Legumes)

11:30-12:30 - **Farmers Perspectives** - Hear directly from farmers about their experience growing Kernza, grab a copy of the “Approaches to Managing Intermediate Wheatgrass for Dual-Use Forage and Kernza® Perennial Grain Production” management document and join in a group discussion about the discrepancies we see between results on research plots and in on-farm fields - and how we bridge this gap.

Farmer Panelists:

- Carmen Fernholz (MN)
- John & Dorothy Priske (WI)
- Josh Svaty (KS)
- Erik Engellant (MT)

Moderator: Aaron Reser, Green Lands Blue Waters

12:30- 1:30 pm – **Lunch** – grass fed beef hamburgers on Kernza buns from Madison Sourdough, catered by Stoddard's Country Grove

1:30-1:45 pm **Activity: Where are you on the spectrum?** Discussion of Management: Organic/Conventional; Scale: Local and Regional markets/Centralized National; Best use: Marginal land & Ecosystem services/Prime land annual replacement

1:45-2:00 pm **Kernza commercialization and markets** (Tessa Peters, The Land Institute)

2:00-3:00 pm **Breakout sessions** 20 min each: choose 3 of 4:

- **Pilot Supply Chains for regional success** (Connie Carlson and Colin Cureton—UMN)
- **Continued commitment from private sector** (James Farag—Patagonia Provisions; Chris Wiegert—Healthy Food Ingredients, Christina Skonberg – General Mills)
- **Farmer-Listening Session/ What are you hearing from farmers:** Top research needs? Top marketing and supply chain questions? (Tessa Peters—The Land Institute and Aaron Reser—Green Lands Blue Waters)
- **Policy incentives for perennials, water quality, and soil health** (Lacey Cochart —WI Dept of Ag; Erin Meier—Green Lands Blue Waters; Cynthia Bartel—Cornell University)

3:00-3:15pm - **Closing remarks**

- Fred Iutzi, The Land Institute
- Julia Olmstead, McKnight Foundation
- Valentin Picasso, University of Wisconsin - Madison

3:15-4:00 pm – Bus back to campus. Thanks everyone!

4:00 pm - free time for networking and socializing at the Memorial Union Terrace.

