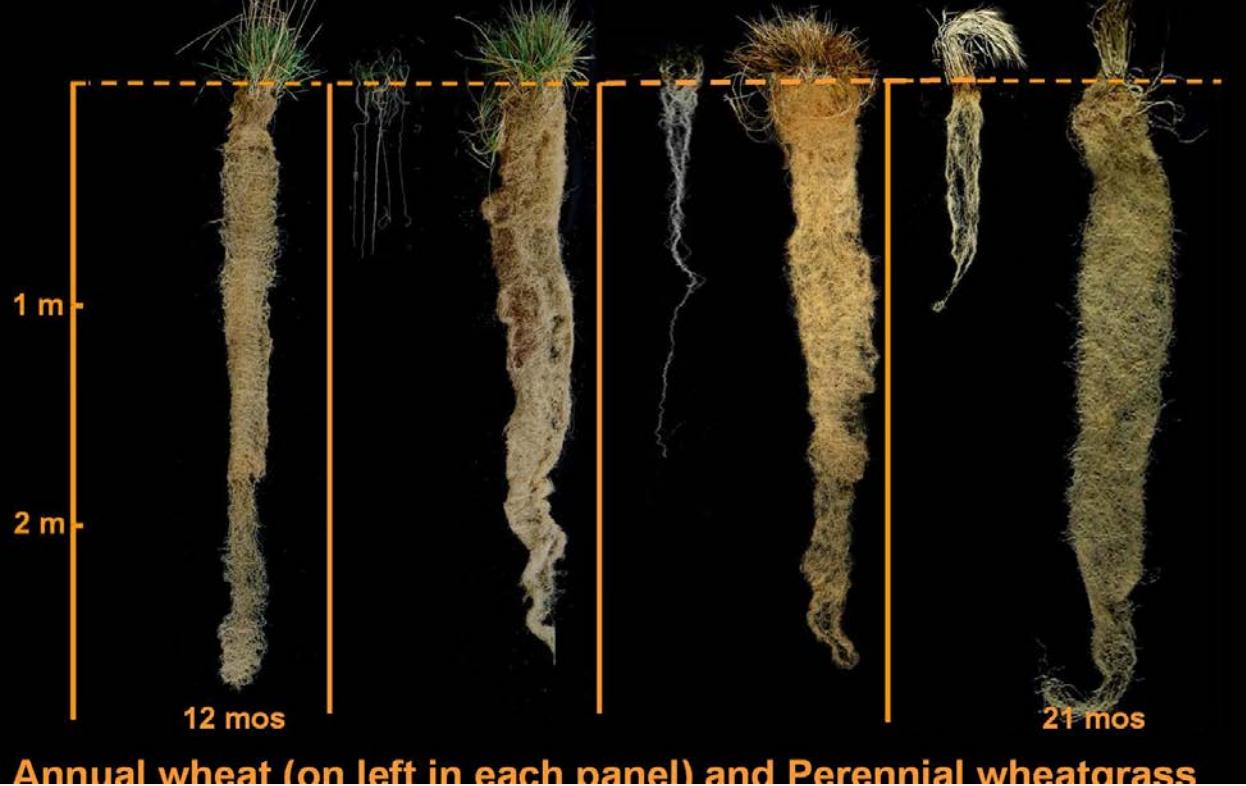




LAND-ATMOSPHERE INTERACTIONS OF KERNZA®

Susanne Wiesner, ORISE – USDA-ARA

UW, Valentin Picasso & Ankur Desai



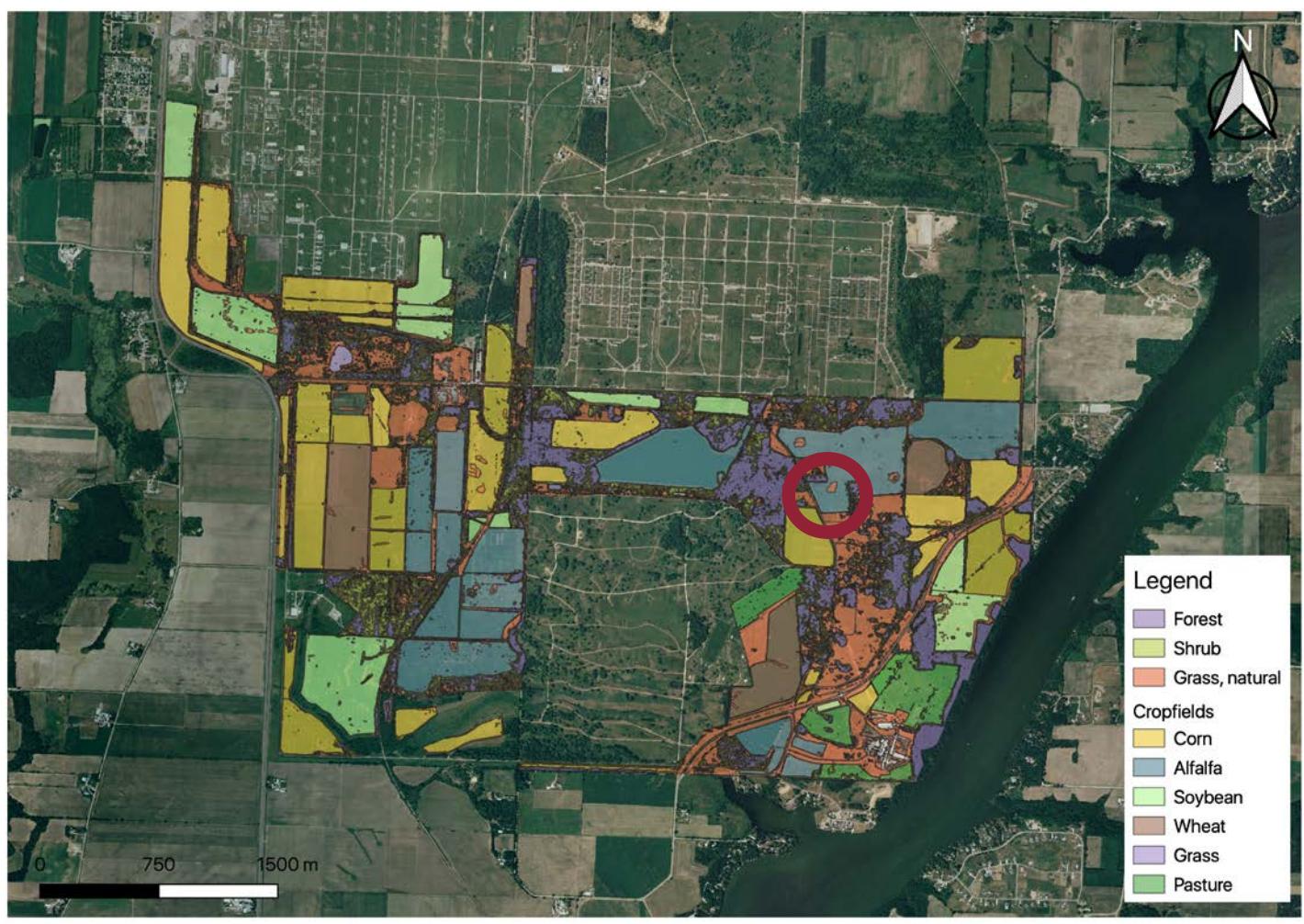
Annual wheat (on left in each panel) and Perennial wheatgrass

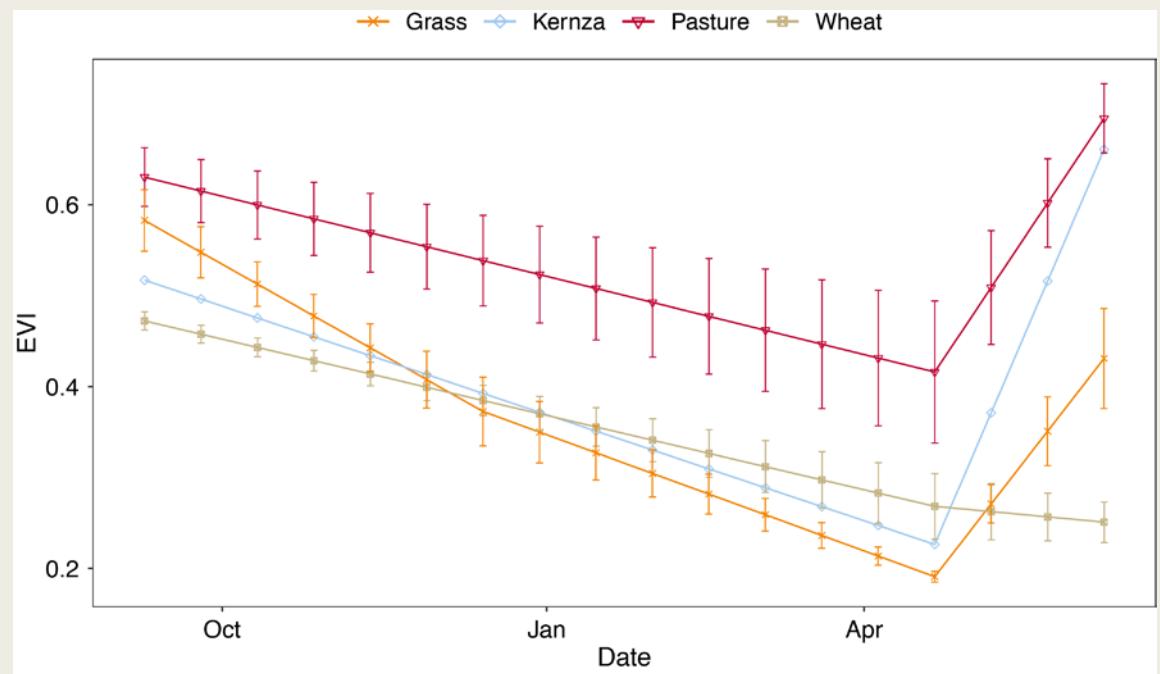
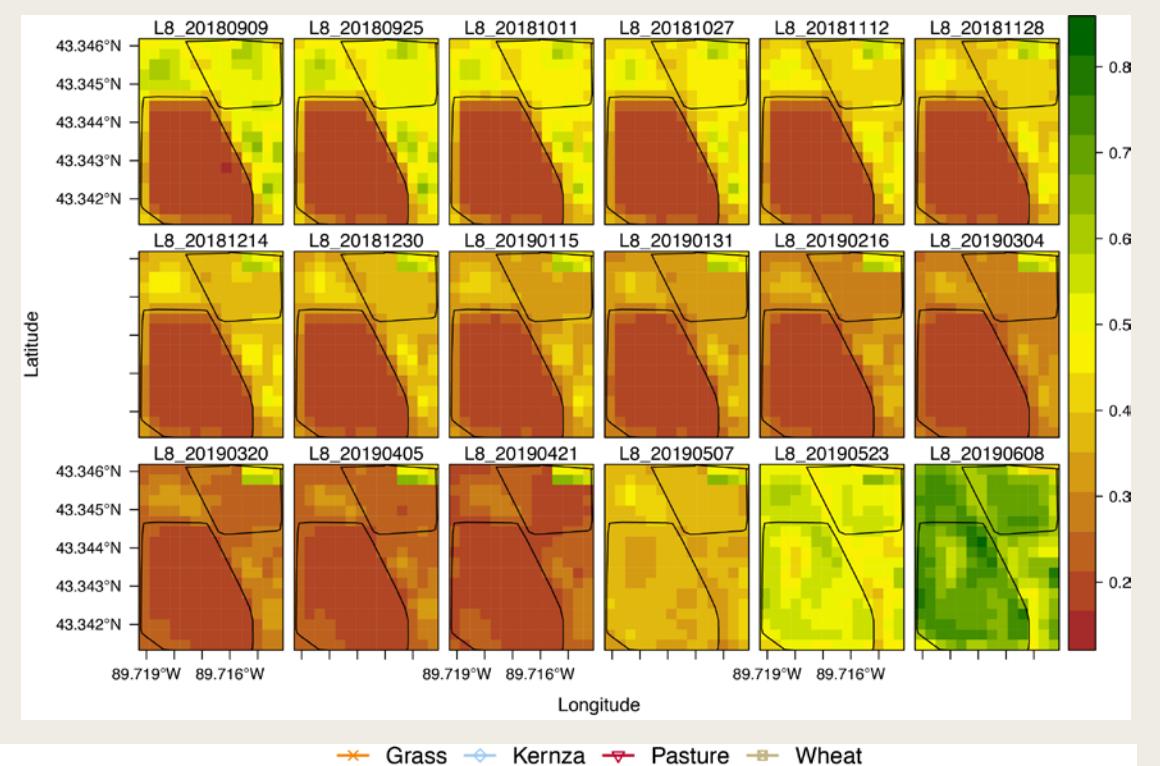


Ecological benefits of *Thinopyrum intermedium*

- Soil conservation and improvement
- Drought resistance and cold hardy

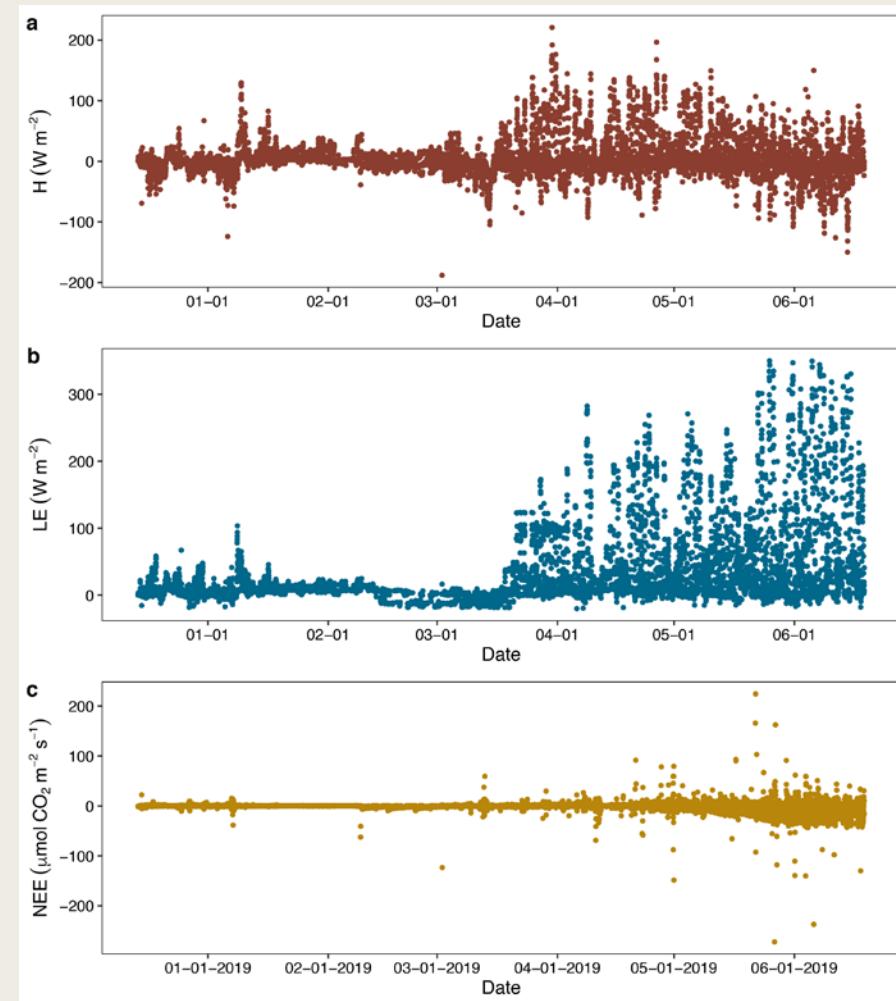
EC tower at DFRC, Prairie du Sac



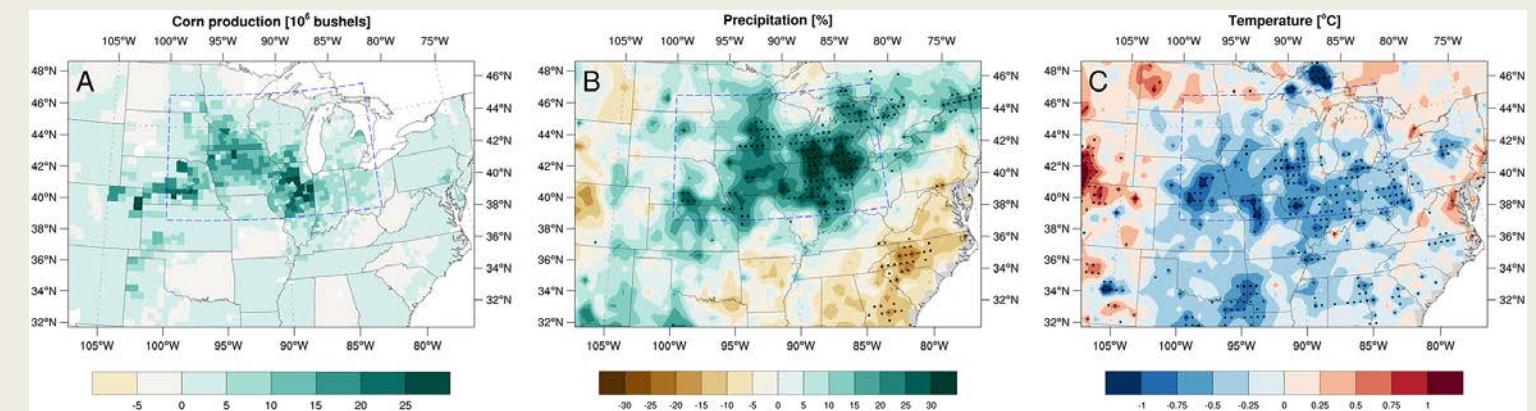
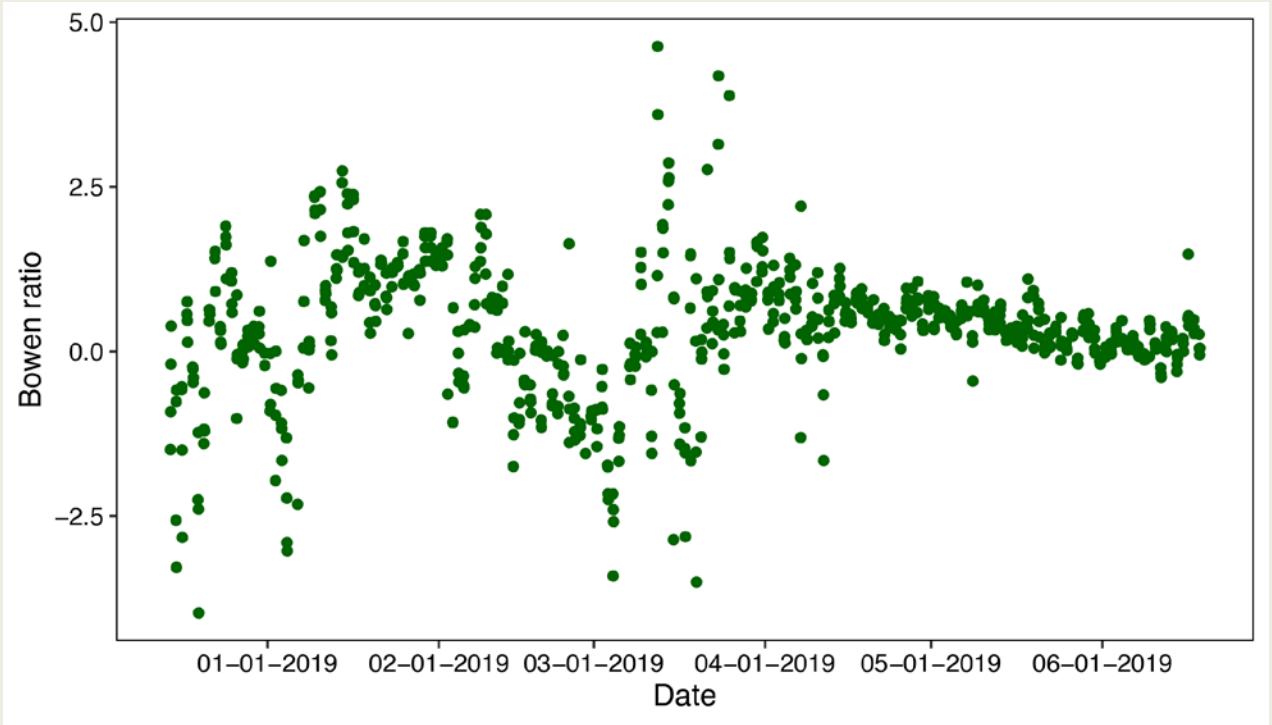




- High WUE (de Oliveira et al. 2018)
- Greater evaporation compared to annual crops (corn and soybean), due to higher LAI
- Greater precipitation use efficiency > lower runoff



Land-Atmosphere Interactions



Alter et al., 2018



Acknowledgments

- Valentin Picasso (UW)
- Ankur Desai (UW)
- Jonathan Thom (UW)
- Kris Niemann (USDFRC)
- Alison Duff (USDFRC)
- Kevin Panke-Buisse (USDFRC)
- Ali Pelletier (USDFRC)
- Malachi Persche (USDFRC)
- Dan Hauke (USDFRC)
- Funding: Patagonia Provisions

