State of the Grain: Defining, Evaluating, and Showcasing the Regional Grainshed in the Upper Midwest U.S.

Grain Value Chain Coordinator Convening #1

October 22, 2026





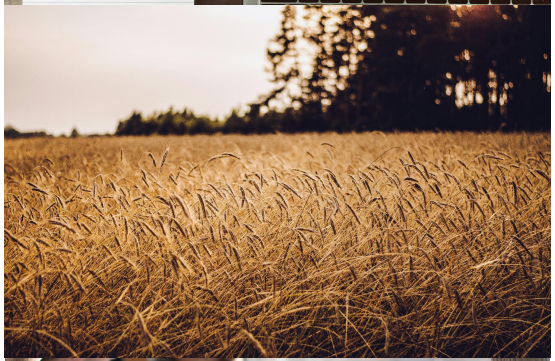


Agenda

11am-2pm CT

11:00 - 11:20 am	Introductions
11:20 - 11:30 am	Project overview and timeline
11:30 am – 12:30 pm	Definition brainstorm
12:30 - 12:45 pm	Break!
12:45 - 1:45 pm	Components of a healthy grainshed brainstorm
1:45 - 2 pm	Closeout and next steps







Introductions



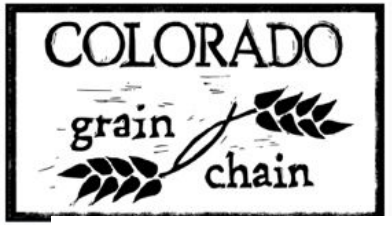




















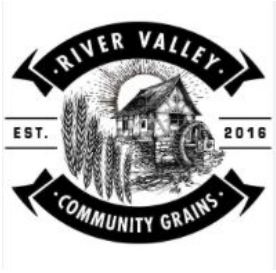












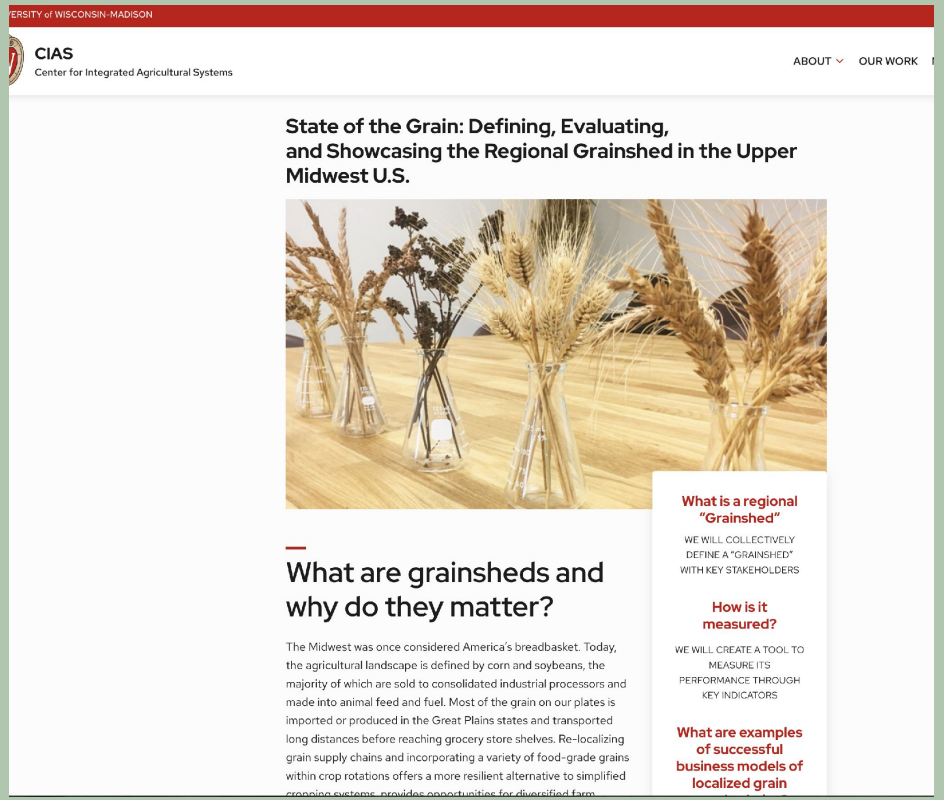






Project Overview

- NCR-SARE 2025 Research & Education Program Award
- **Purpose:** to create a shared understanding of a "grainshed" and a tool to measure its performance
- **Project website:** https://cias.wisc.edu/our-work/state-of-the-grain/



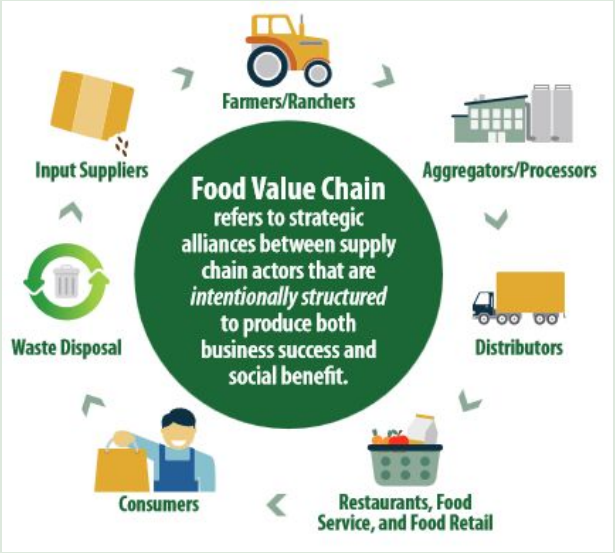


Project Background

Project Context

Growth of local/regional grain value chains

Concept of a “grainshed” emerging as a solution to the challenges of industrialized commodity grain production and long supply chains



Adoption of the term “Grainshed”



THE GRAIN SHED

The Grain Shed's purpose is to develop a vibrant food system, connected community, and shared ownership by producing breads, beers and foods made from regeneratively grown regional ingredients through cooperative enterprise. We make breads the old world way with locally grown, stone milled flour, naturally leavened, and wood fire oven baked. Our beers also utilize 100% locally grown and malted grains!

Click Here to Listen to Season 2 "Field to Flour">

UNPACKING THE GRAIN SHED

Welcome to Season 1 of the Inland Northwest Artisan Grains™ Podcast series! Join us in exploring the unique structure of The Grain Shed, a bakery, restaurant, and brewery in the Perry District of Spokane, WA.

Learn More >



Blog » A Regional Grain Shed Being Transformed

A Regional Grain Shed Being Transformed

February 1, 2019 By Hailey Schurr

FARM

A Grainshed Rises in the Northeast

A new network of brewers, maltsters and bakers is looking to rebuild a local breadbasket.

#Food & Drink #Plants & Crops

by Catie Joyce-Bulay · February 28, 2021

Lack of Research and Consensus



- Little research on local/regional grain value chain development and needs
- Academic research uses “local grain economies” or “alternative grain networks”
- Practitioner networks and food journalists adopted the concept of “grainshed”
- No consensus on how to define a “grainshed”

Opportunity for Exploratory Research

- Bring academic and practitioner work together
- Collectively understand what we mean by a “grainshed”
- Create a framework for measuring the current state of regional grainsheds and their development over time

Holistic, collaborative, supply chain-wide approach



Existing Academic Work

Watershed

Foodshed

"How better to grasp the shape and the unity of something as **complex** as a food system than to graphically imagine the **flow of food** into a particular **place**? Moreover, the replacement of "water" with "food" does something very important: it connects the **cultural ("food") to the natural ("...shed")**. (Kloppenburg et al. 1996)

"Foodshed can be generally understood as the geographic areas with potential to feed population centers" (Peters et al., 2009)

Alternative Grain Network

"Micro-systems that supplement conventional food production and distribution systems, emphasizing high quality food and leveraging regional, socio-cultural and socio-economic values." (Meyer et al. 2024)

Local Grain Economy

Arizona's local grain economy as the network of businesses involved in production, primary processing, secondary processing, intermediate products, and end products for human consumption within a 150-mile (240-km) radius of central Arizona..." (Forrest & Wiek 2021)

Existing “Grainshed” Definitions

Distance

"The distance from where grain is produced to the place where it is consumed, including the land it grows on, the route it travels, the markets it passes through & the tables it ends up on..." (UNH presentation, n.d.)

National Boundaries

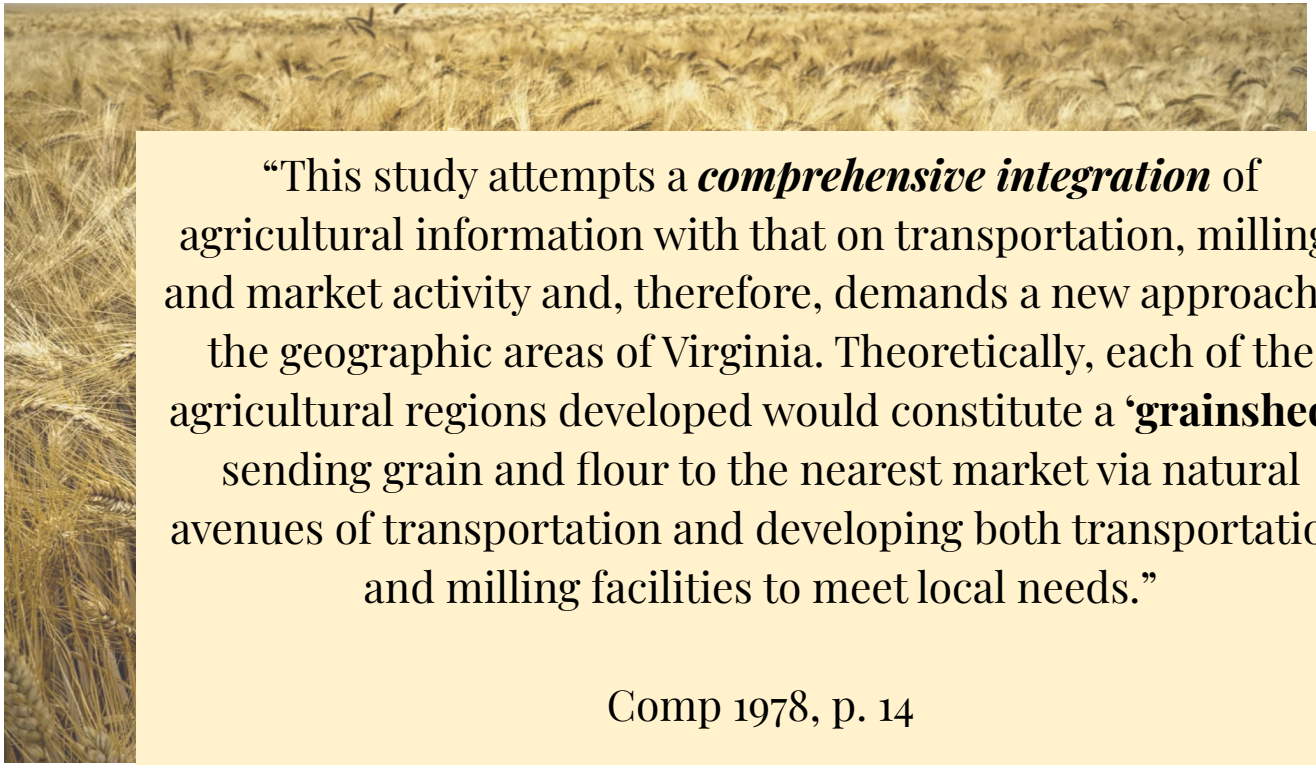
"The focus is on the Nigerian cowpea grainshed (NCG) comprising Benin, Burkina Faso, Côte d'Ivoire, Ghana, Mali, Niger, Nigeria, and Togo in ECOWAS, and Cameroon, Chad, and Gabon in the Central African Economic and Monetary Community (CAEMC)." (Arndt et al 2005)

Load-Out Facilities

Grainsheds are based on facilities that have the capability to load trains for export or river barges going to the Gulf. These individual load-out facilities serve as the focal point of each grainshed, and the production area and the elevators that feed into that particular facility make up the area surrounding each grainshed. (Plains Grains Incorporated Fact Sheet, 2010)

Comprehensive Integration

“each of the agricultural regions developed would constitute a **‘grainshed,’** sending grain and flour to the nearest market via natural avenues of transportation and developing both transportation and milling facilities to meet local needs.” (Comp 1978)



"This study attempts a ***comprehensive integration*** of agricultural information with that on transportation, milling, and market activity and, therefore, demands a new approach to the geographic areas of Virginia. Theoretically, each of the agricultural regions developed would constitute a **'grainshed,'** sending grain and flour to the nearest market via natural avenues of transportation and developing both transportation and milling facilities to meet local needs."

Comp 1978, p. 14

Research Plan

Step 1



Create a shared definition of the “grainshed”

✅ Review existing literature (reports, media, etc.)

➔ Two convenings of grain chain stakeholders to develop shared language

- What are the goals?
- What are the key components?
- What are the boundaries?

Research Plan

Step 2



Develop a framework for measuring grainshed health

- ➔ Identify key components of a healthy grainshed
- ➔ Identify quantitative indicators to measure the health and growth opportunities of grainsheds in the U.S.
- ➔ Develop evaluative tool
- ➔ Apply evaluative tool to the Upper Midwest as a proof of concept, the Midwest is the guinea pig

What are we trying to get out of this work?

- **Adoption of "grainshed" language across participants and beyond**
  - *Adoption by grainchain orgs, state/federal agencies, NGOs, academics, Extension etc.*
  - *Visibility on websites, outputs etc.*
- **More entities collecting data to measure grainshed indicators and setting targets**
- **More entities reporting on grainshed health via websites, newsletters, briefs, reports, academic papers etc.**
- **Show a need to funders for greater support towards grainshed development**
- **Greater understanding of the grainshed and what is needed to create a more robust regional grain economy**

Our Ask To You

- **Participation in two virtual brainstorming sessions**
  - This one!
  - Jan/Feb 2027 - 1-2 hours via Zoom
- **Goals of our time together across both convenings**
  - Draft a shared definition of the “grainshed”
  - Identify components of a healthy grainshed that we can develop into indicators for an evaluative tool
  - Brainstorm a plan for use of the evaluative tool

Our offer: $250 Visa Gift card as a token of appreciation



Questions?
Clarifications?

Institutional Review Board (IRB) Consent

- You have a **letter of information** that provides details of your participation in this research study. Please take a few moments to read this letter and ask any questions you may have
- Your participation in this convening is completely **voluntary**
- You can **leave** at any time
- We would like to **record** today's conversations for transcription purposes only
- **Confidentiality:** Only members of the researcher team will have access to recordings and transcripts from today. Any final outputs resulting from this work will not include any information that could identify you

Goals for the Two Convenings

Convening 1 (Today)

- ➔ Brainstorm definitions of a “grainshed”
- ➔ Identify components of a healthy grainshed

Convening 2 (Jan/Feb 2027)

- ➔ Finalize the definition
- ➔ Review proposed indicators
- ➔ Brainstorm plan for use of evaluative tool



Definition Brainstorm

When you think of a "grainshed" what are some key words that come to mind?

Word Cloud → Small Group Discussion → Large Group Report Back

What is your definition of a “grainshed”?

Things to think about:

- What are the goals?
- What are the key components?
- What are the boundaries?
- What resonates and what is missing from **existing definitions?**
- How can we bring together the words from the **Word Cloud** into a coherent definition?
- Can we build a definition that can be used **across regions?**





Alternative Grain Network	"Micro-systems that supplement conventional food production and di emphasizing high quality food and leveraging regional, socio-cultura socio-economic values." (Meyer et al. 2024)
Local Grain Economy	“Arizona’s local grain economy as the network of businesses involve (farms), primary processing (grain handlers, maltings, mills), and sec (bread bakeries, pasta makers, pizzerias, tortillerias, breweries, disti stores) of small grains (wheat, barley, oats), intermediate products (c malt), and end products (bread, beer, or pasta) for human consumpt 150-mile (240-km) radius of central Arizona...” (Forrest & Wiek 2021
Grainshed	"A geographical region in which the production, processing, distributi consumption of grain for food occurs" (Definition we created for our g **Focus: Distance** "The distance from where grain is produced to the place where it is c including the land it grows on, the route it travels, the markets it pass tables it ends up on..." (UNH presentation on grain production in Ne

Small group break-outs:
What is your definition of a “grainshed”?

Logistics

- 20 minutes
- Four breakout rooms ~ 4-5 people per room
- Facilitator in each room to help guide and troubleshoot
- Google Document with word cloud, list of existing definitions, and space for note-taking
- Report back at the end





Alternative Grain Network	"Micro-systems that supplement conventional food production and di emphasizing high quality food and leveraging regional, socio-cultura socio-economic values." (Meyer et al. 2024)
Local Grain Economy	“Arizona’s local grain economy as the network of businesses involve (farms), primary processing (grain handlers, maltings, mills), and sec (bread bakeries, pasta makers, pizzerias, tortillerias, breweries, disti stores) of small grains (wheat, barley, oats), intermediate products (c malt), and end products (bread, beer, or pasta) for human consumpt 150-mile (240-km) radius of central Arizona...” (Forrest & Wiek 2021
Grainshed	"A geographical region in which the production, processing, distributi consumption of grain for food occurs" (Definition we created for our g **Focus: Distance** "The distance from where grain is produced to the place where it is c including the land it grows on, the route it travels, the markets it pass tables it ends up on..." (UNH presentation on grain production in Ne



Report back & discussion

15 Minute break!







What does a healthy grainshed look like?

Miro Sticky Note Activity



Things to consider as you brainstorm

- What is the goal of the grainshed?
- What **grains/goods** are being produced?
- How are they being **produced** and what are they being **produced for**?
- To what extent do we incorporate:
    - **Social** factors (justice, diversity, feeding people)?
    - **Ecological** factors (sustainability, resilience, diversification)?
    - **Economic** factors (profitability and enterprise resilience)?

Small group break-outs:
What does a healthy grainshed look like?

Logistics

- 30 minutes
- Four breakout rooms ~ 4-5 people per room
- Facilitator in each room to help guide and troubleshoot
- Report back at the end



Report back & discussion on sticky notes



Any lingering thoughts or ideas from the past 3 hours?



Closeout and next steps

Convening 1 (Today)

- ➔ Draft definition of a “grainshed”
- ➔ Identify components of a healthy grainshed

Convening 2 (Jan/Feb 2027)

- ➔ Finalize the definition
- ➔ Review proposed indicators
- ➔ Brainstorm plan for use of evaluative tool



What we need from you:

Respond to email to schedule the second convening

Thank you for your participation!!



