

Watching grass grow: Monitoring the processes and partnerships of grazing on Wisconsin's public lands

Greta Landis, Jacob Grace, Alden Dirks, Laura Judge, Sam Asper, Courtney Bolinson, Alan Turnquist, Mark Renz, Christine Ribic, Mark Rickenbach, and Randall D. Jackson

This work was funded by a UW-Madison College of Agricultural and Life Sciences Hatch Grant and an NCR-SARE Graduate Research Award (GSP16-023). Contact: greta.landis@wisc.edu

Background

The Wisconsin Dept. of Natural Resources (DNR) and other agencies are partnering with livestock graziers to help manage undesirable vegetation and achieve wildlife goals on public-access grasslands. As cattle graze public lands in pilot projects, researchers are investigating opportunities and challenges of public-private partnerships in conservation agriculture.

The iterative project structure includes collaboration and learning across four desired outcomes related to natural resource management, generating applied research projects to meet new needs and interests as the partnerships evolve.

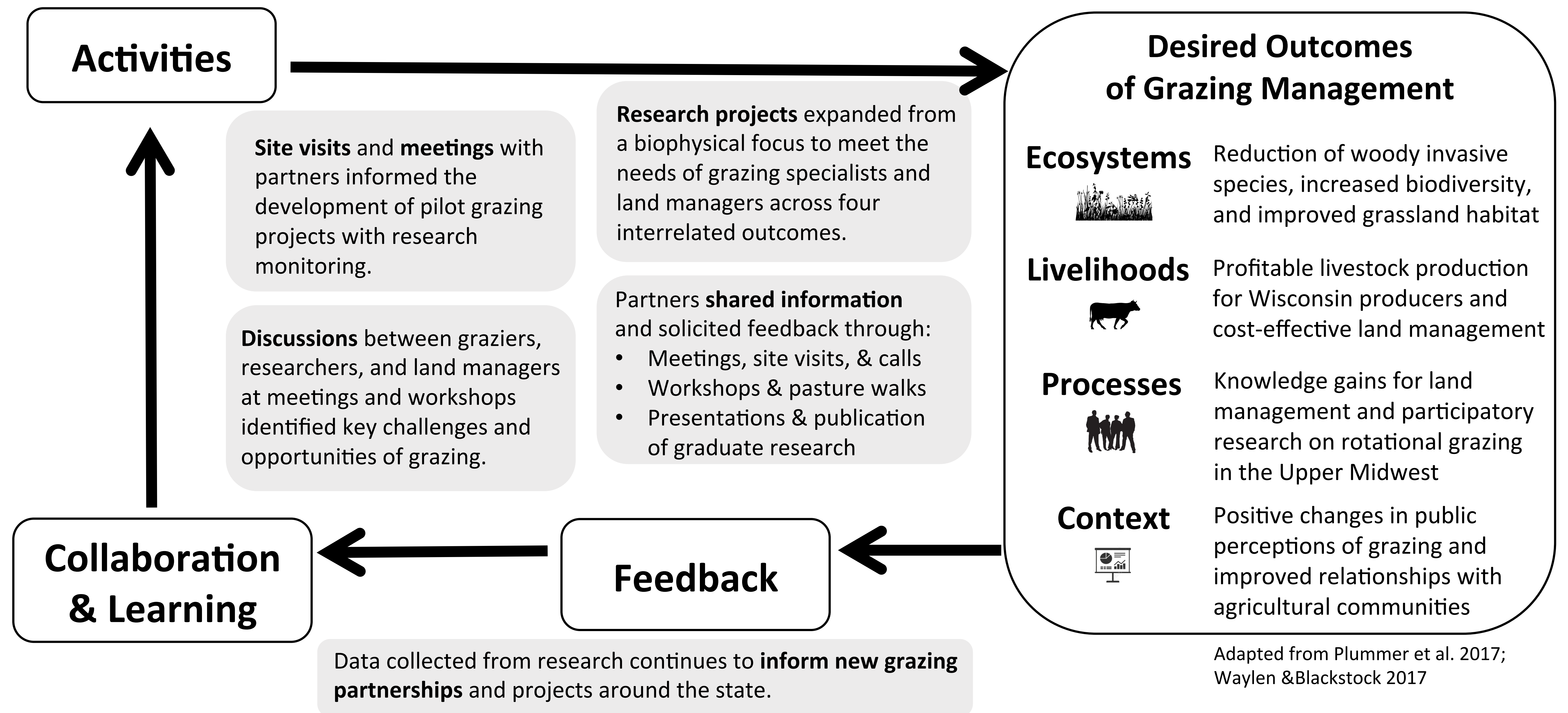


Site visits with grazing specialists and land managers; monitoring plant community changes at grazing sites, 2015-2017

Mixed Methods

Graduate monitoring of grazing on public lands includes:

- Comparing grazing effects **on plant community composition and structure** in combination with herbicide and mowing
- **Statewide survey** of beef producers to assess interest and economic decision-making for public land grazing contracts
- **Wildlife surveys** of prairie chickens, grassland songbirds, and gamebirds on grazed and ungrazed lands in central Wisconsin
- **Interviews** with land managers and graziers to define outcomes of successful grazing on public lands
- Characterizing grassland plant communities and soils in combination with **remote sensing** and modeling
- Assessing impacts of grazing on beneficial **mycorrhizal fungi**



Defining grazing outcomes: "Success is a **vibrant grassland** with good diversity and low-cost maintenance... where we learn something from the grazing about how to effectively manage the landscape." - Wisconsin Wildlife Biologist



Cattle grazing at pilot project site, 2017



Public pasture walk at grazing site, 2016 (DNR)

Takeaways

A collaborative project structure builds flexibility into agroecology research. Partners adjust to new needs and interests by revisiting research objectives with land managers and graziers.

Research monitoring and group decision-making inform new grazing initiatives to work toward multiple outcomes of 'successful' grazing.

Acknowledgements

Thank you to our many collaborators, partners, and the University of Wisconsin-Madison for supporting this work.

For more information, please visit: <https://grazingpubliclands.wisc.edu/>