



Welcome to *The Current*, the North Central Region Water Network's Speed Networking Webinar Series

Indigenous Perspectives on Water and Conservation: 2PM CT

1. Submit your questions for presenters via the chat box. The chat box is accessible via the purple collaborate panel in the lower right corner of the webinar screen.
2. There will be a dedicated Q & A session following the last presentation.
3. A phone-in option can be accessed by opening the Session menu in the upper left area of the webinar screen and selecting "Use your phone for audio".

This session will be recorded and available at northcentralwater.org and learn.extension.org.



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northcentralwater.org



Charlie Barden



Dr. Charles Barden has worked as a Research and Extension Forester since 1989 and began his current position as State Extension Forester and Professor at Kansas State University in 1998.

He enjoys conducting applied research using trees to solve environmental problems, (i.e., streambank stabilization, riparian buffers, urban stormwater, phytoremediation, windbreaks, and bioenergy). He has a particular interest in the use of cedar revetments to stabilize banks of smaller streams and has monitored some installations for over 20 years. He works closely with the Kickapoo and Prairie Band Potawatomi tribes in Kansas and frequently advises them on natural resource issues. He co-authored a book chapter about this collaboration with the Native American community entitled “Cross-cultural Collaboration for Riparian Restoration on Tribal Lands in Kansas” included in the book *Pathways for Getting to Better Water Quality: The Citizen Effect*.

He earned his Ph.D. from Penn State, and his Master’s degree from Virginia Tech, both in Forestry. A native of Rhode Island, he earned his B.S. degree in Natural Resource Management from the University of Rhode Island.





Today's Presenters:

- **Dr. Dan Wildcat**, Indigenous & American Indian Studies faculty member at Haskell Indian Nations University
- **Christina Gish Hill**, Associate Professor, Department of World Languages and Cultures at Iowa State University
- **Derrick Kapayou**, Master's candidate in the Department of World Languages and Cultures at Iowa State University

Follow @northcentralh2o and #TheCurrent on Twitter for live tweets!





Daniel Wildcat



Daniel R. Wildcat is a Yuchi member of the Muscogee Nation of Oklahoma. His service as teacher and administrator at Haskell spans 35 years. In 2013 he was the Gordon Russell visiting professor of Native American Studies at Dartmouth College. He has served as adjunct faculty for the Bloch School - UMKC for the past decade. Dr. Wildcat received B.A. and M.A. degrees in sociology from the University of Kansas and an interdisciplinary Ph.D. from the University of Missouri at Kansas City. In 1994 he helped form a partnership with the Hazardous Substance Research Center at Kansas State University to create the Haskell Environmental Research Studies (HERS) Center as a non-profit Native American research center to facilitate: 1) technology transfer to tribal governments and Native communities, 2) transfer of accurate environmental information to tribes, and 3) research opportunities to tribal college faculty and students throughout the United States. He is the author and editor of several books: *Power and Place: Indian Education In America*, with Vine Deloria, Jr.; *Destroying Dogma: Vine Deloria's Legacy on Intellectual America*, with Steve Pavlik. His most recent book, *Red Alert: Saving the Planet with Indigenous Knowledge*, suggests current environmental issues will require the exercise of indigenous ingenuity - indigenuity - and wisdom if humankind is to reduce the environmental damage underway. He is a co-author on the Southern Great Plains chapter of the Fourth National Climate Assessment.





Indigenous Perspectives On Water and Conservation

Dr. Daniel R. Wildcat

Haskell Indian Nations University

North Central Region Water Network Webinar

Tuesday, February 17, 2021



Christina Gish Hill

Christina Gish Hill is an associate professor in the World Languages and Cultures department at Iowa State University, focusing on American Indian/Native cultures of the Northern Plains and Midwest. Her current research explores of how social relations impact cultural expressions of Native relationships with their landscapes in the face of colonial forces working to disrupt these relationships. She is interested in all aspects of Native food sovereignty, including the efforts of Native nations and growers to reinvigorate Native foodways, particularly Indigenous forms of agriculture, including welcoming Native seeds home through rematriation. She studies the history of Native agriculture in North American, the U.S. policies that led to its decline, and the efforts of communities to reverse that process today.



Derrick Kapayou



Derrick Kapayou is a 2nd year graduate student with his research focus being the cultural connections Native Americans have to their soil, as well as the agronomic impact of their traditional gardens. He is a member of the Meskwaki Nation, located in central Iowa, and proudly represents his community as a double masters (MS-Sustainable Agriculture, MA-Anthropology) student at Iowa State University. His favorite vegetable to grow in his home garden is cherry tomatoes because they make him think of his grandma.



Lessons from Indigenous Farming: How the Three Sisters Improves Communities From the Ground Up



Presenters:

Dr. Christina Gish-Hill,

And

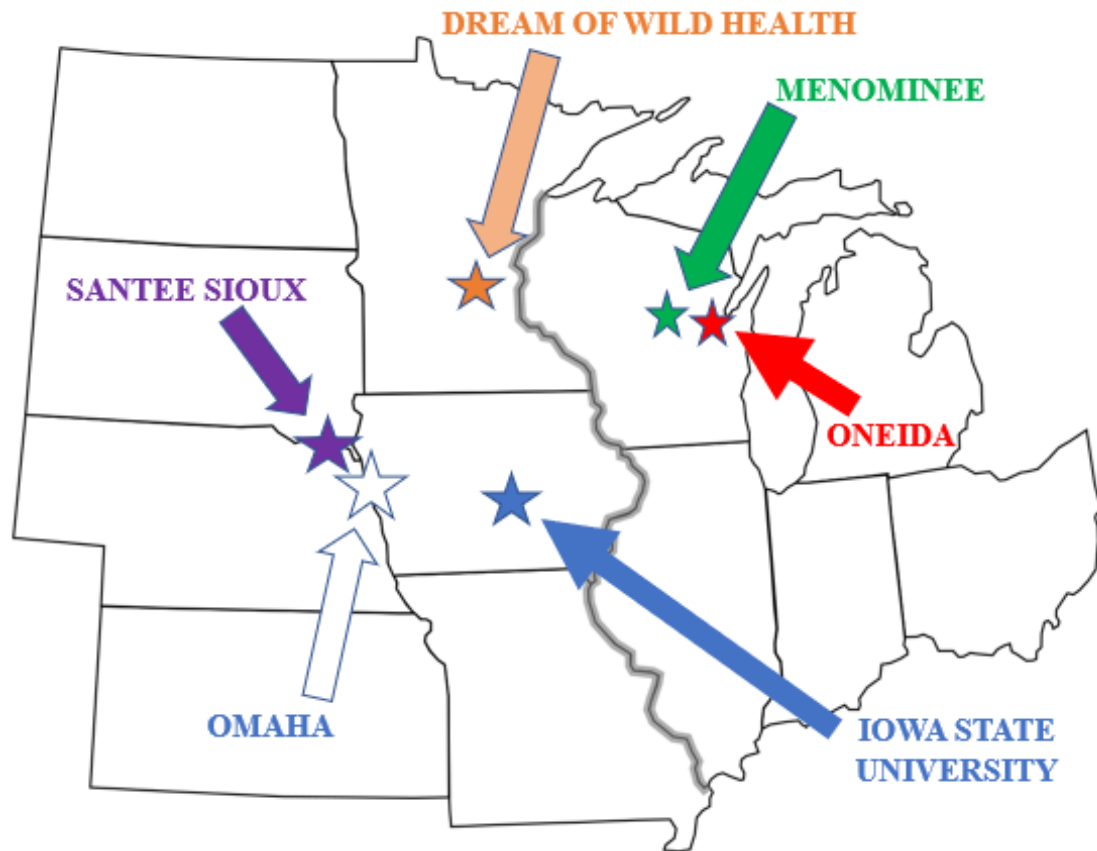
Derrick Kapayou





Plant-soil-human conceptual cycle. Native cultural practices determine their relationship with their soils, helping to grow healthy crops that support a sustainable community.

Map of the United States Upper Great Lakes region showing locations of collaborator tribal communities.







Online workshop training for better garden management

TRAINING TOPICS

- DIY Soil Health Tests - Dr. Marshall McDaniel
- Key insect pests of squash, beans, and corn - Dr. Donald Lewis
- Basics and troubleshooting composting - Dr. Ajay Nair

WORKSHOP DETAILS

October 30, 2020

Friday, 12:30-3:30pm

Workshop Link:

<https://iastate.webex.com/iastate/j.php?MTID=m177d35e16f48326b16c15c39b1c77462>

Password: iCmcdMRH976

Join by phone:

+1-415-655-0001; Access code: 120 317 3528

Contact:

Dr. Christina Hill, cghill@iastate.edu, 515-294-0101

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Extension programs are available to all without regard to race, color, national origin, religion, sex, age, or disability.

IOWA STATE UNIVERSITY

World Languages and Cultures; Sustainable Agriculture





**Hulburt Creek Garden Beds
Archeological District**

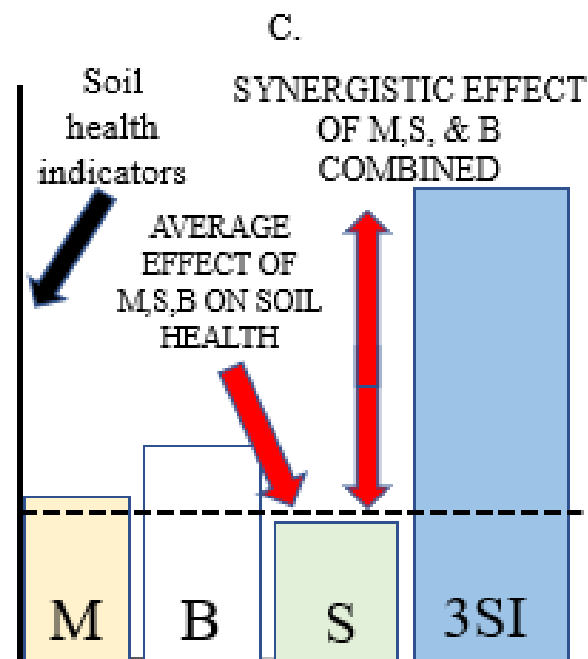
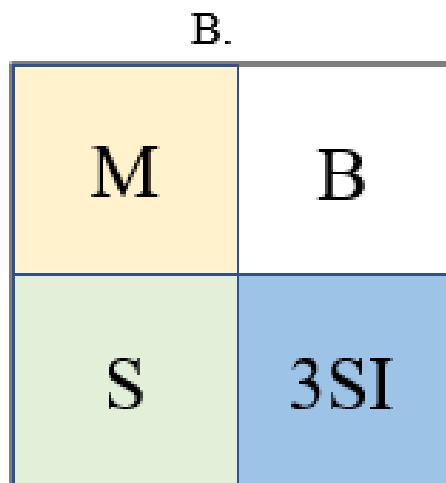
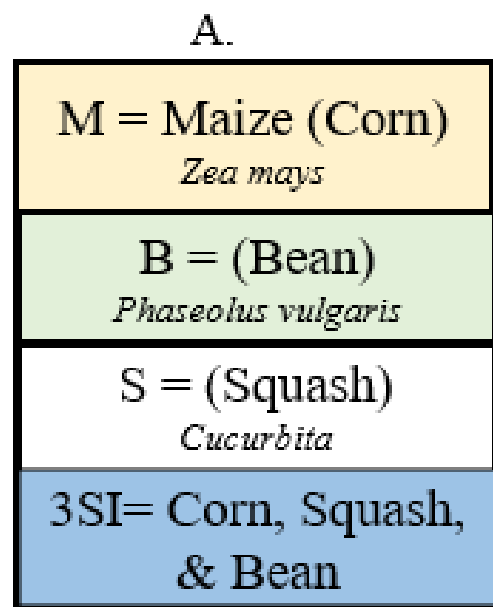


Ancient ridges on the Menominee Reservation.

Oral traditions and archaeological excavations suggest the sites date from 1000AD to the mid 19th century.

Site tour provided by Dr. Gartner (UW-Madison) and Dr. Overstreet (College of the Menominee Nation) during the summer of 2019.

Description of experimental design and associated hypothesis. Items A. and B. describe plot layouts. Item C. describes the synergism effect we expect from the 3SI working together on soil health





Monocrop corn plot, 2 weeks post-derecho with 3-Sisters plot in background



Image showing soil CO₂ Burst, a measure of soil microbial activity, for soil under each sister and under the Three Sisters combined (4). “Three Sisters” increases soil microbial activity by 24% (P=.01)

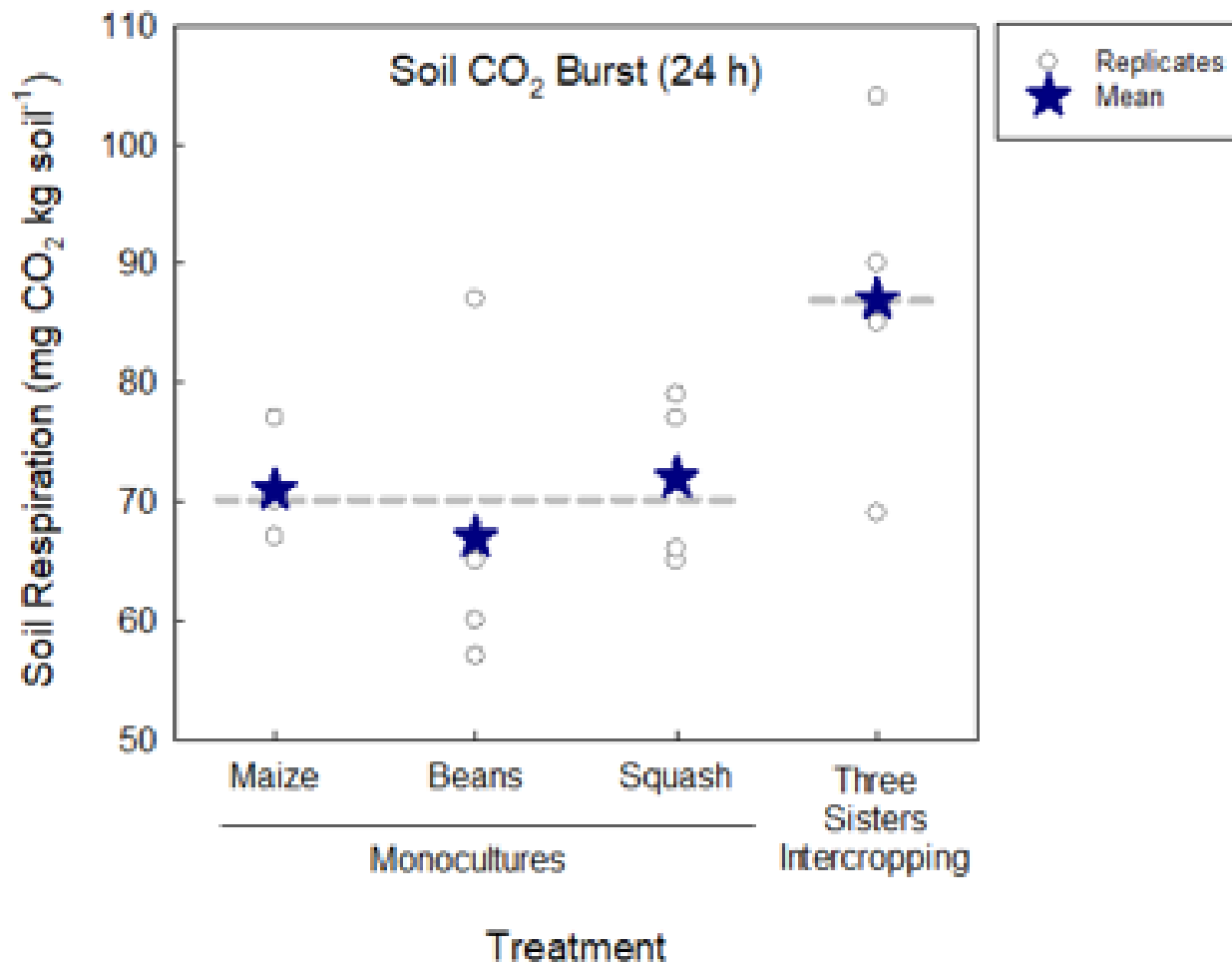
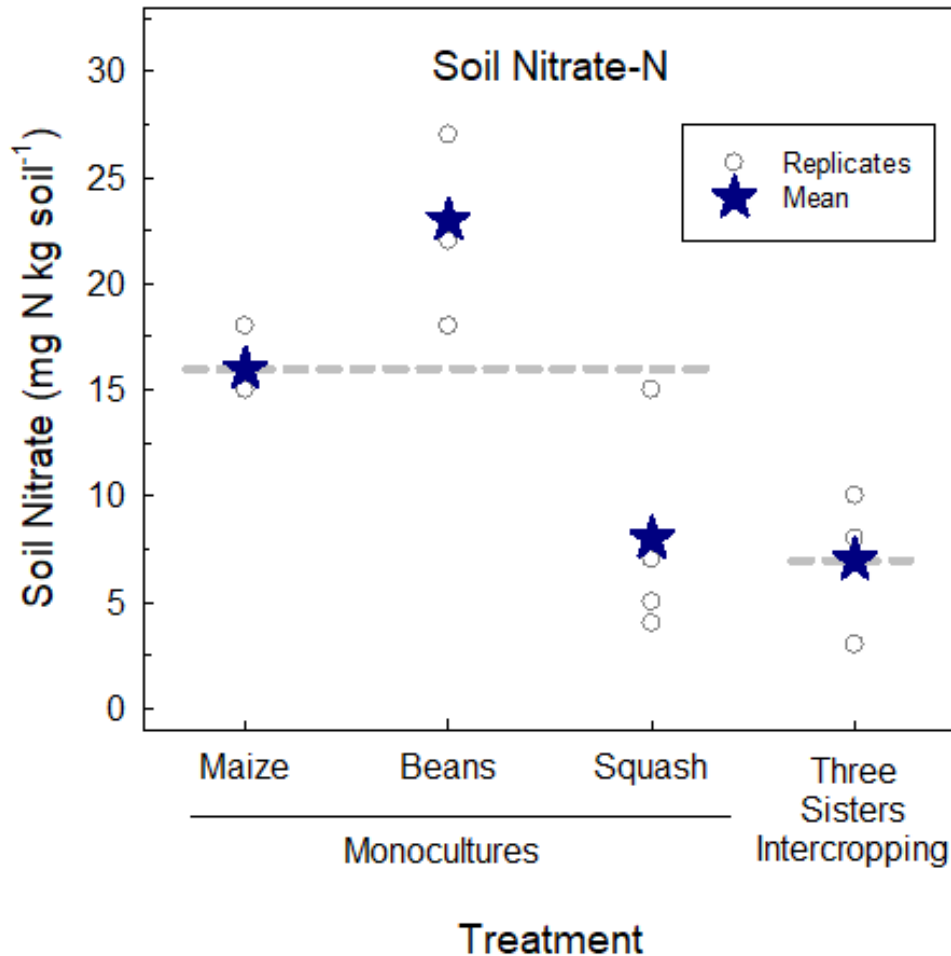


Image showing salt extractable nitrate values obtained under 3Sisters (3), and monocrop beans (B), corn (C), and squash (S). “Three Sisters” decreases salt extractable nitrate by 54% when compared to individual crops







Lessons from Indigenous Farming: How the Three Sisters Improves Communities From the Ground Up

Presenters:

Dr. Christina Gish-Hill,

And

Derrick Kapayou





Question and Answer Session

We will draw initial questions and comments from those submitted via the chat box during the presentations.

Today's Speakers

Daniel Wildcat – dwildcat@haskell.edu

Christina Gish Hill – cghill@iastate.edu

Derrick Kapayou – dkapayou@iastate.edu





Visit northcentralwater.org, to access the recording and our webinar archive!

Upcoming Webinars from our climate and soil health teams:

Understanding Climate Adaptation Decisions in the Eastern Corn Belt

Monday, February 22, 2021 at 1pm CT

Register at <https://northcentralclimate.org/webinars/>

Soil Health for Nebraska Wealth

Wednesday, February 24, 2021 at 2pm CT

Register at <https://soilhealthnexus.org/>

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Thank you for participating in today's *The Current*!

The North Central Region Water Network Webinar Team:

Host — Charlie Barden, Kansas State University

Organizers — Anne Nardi and Rebecca Power, UW-Madison Division of Extension

Technical Support — Janice Kepka, UW-Madison Division of Extension

Production Assistance — Martha Martin, UW-Madison Division of Extension

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