Presenter Bios

Francisco J. Arriaga (University of Wisconsin-Madison)
Soils are an important and fragile natural resource. My research supports the development of management systems that promote crop productivity, as well as soil and water conservation. Interests include tillage, soil compaction issues, crop residue management, cover crops, and water quality and quantity issues. Education and selected publications.

Arun Bawa (South Dakota State University)
PhD candidate at South Dakota State University. Research area: Understanding water quality and hydrological impacts of adopting conservation practices using field experiments and hydrological modeling approaches

Hava Blair (University of Minnesota)
Hava Blair is a graduate student in the Department of Soil, Water, and Climate at the University of Minnesota - Twin Cities. Her research includes on-farm evaluations of the sensitivity and landscape variability of soil properties proposed as soil health indicators.

Anna Cates (University of Minnesota)
Dr. Cates is the State Soil Health Specialist for the University of Minnesota Extension. She studied soil science, agroecology, and agronomy at UW-Madison, receiving an MSc and PhD. Dr. Cates' research focuses on soil organic matter storage and cycling and developing soil health systems for upper Midwest cropping systems. Dr. Cates leads the MN Office for Soil Health, a collaboration between the MN Board of Water and Soil Resources and the MN Water Resources Center.

Grey Evenson (Ohio State University)
Dr. Grey Evenson previously served as a postdoctoral research with Dr. Margaret Kalcic in the Department of Food, Agricultural and Biological Engineering at The Ohio State University. Grey has a Ph.D. in Geography from Ohio State with expertise in in process-based modeling and geospatial analysis. Dr. Evenson's research focuses on assessing conservation practice impacts on watershed hydrology and nutrient cycling.

Kevin Fermanich (University of Wisconsin-Green Bay)
Kevin is a Professor of Water Science, Geoscience, and Environmental Science at the University of Wisconsin-Green Bay where he has worked since 1998. Kevin also holds an appointment as a soil and water resources specialist with Wisconsin Extension.   Kevin and his students frequently collaborate with other scientists and stakeholders to study and test solutions to water quality, watershed management, soil health, Green Bay restoration, and agricultural management issues. Kevin earned MS and PhD degrees in soil science from the University of Wisconsin-Madison. Key co-authors on the presentation are Molly Meyers (UWGB), Luke Loken (USGS) and Matt Dornbush (UWGB).

Anne-Marie Fortuna (USDA ARS - Oklahoma)
Dr. Fortuna is a Research Soil Scientist at the Grazinglands Research Laboratory, USDA-ARS in El Reno, OK. Her research focuses on microbial and soil process regulating nutrient cycling, soil health and global climate change in agricultural and grassland systems as well as the use of soil health indicators to measure the effectiveness of remediation and land management strategies. Her nationally recognized program addresses environmental quality and its impacts on land, air and water resources. Ann-Marie's published research covers a variety of topics including soil health, microbial ecology, recycling of organic wastes, soil organic matter turnover, carbon sequestration and sustainable cropping systems management for soil maintenance and protection.

Jessica Gutknecht (University of Minnesota)
Jessica Gutknecht is an Associate Professor in the Department of Soil, Water, and Climate and an Associate of the Institute on the Environment, with a PhD in soil microbiology from the University of Wisconsin. She is a soil ecologist with years of experience understanding how soil and soil biological communities mediate ecosystem responses to climate change in

both natural and agricultural landscapes. Her research is centered on the idea that the soil beneath our feet offers solutions for the adaptation and mitigation of climate change, as well as other environmental challenges. In agricultural systems she is exploring how regenerative and perennial cropping systems, aimed at protecting soils, can adapt agricultural management for climate change, serving both people and the environment.

Margaret Kalcic (Ohio State University)
Margaret Kalcic's research is in the area of watershed hydrology with a particular focus on water quality in agricultural regions. Before taking a faculty position at OSU she completed her undergraduate degree focused on Bioengineering at F. W. Olin College of Engineering, her Master's and Ph.D. in Ecological Engineering at Purdue University, and a postdoc at the University of Michigan. Since 2013 she has worked on decision support tools and watershed modeling in the western Lake Erie watersheds to encourage policy- and agricultural decision-makers to incentivize and adopt effective conservation measures to tackle Lake Erie's nutrient goals. She has a broad and applied research program spanning water quality modeling, geospatial analysis, stakeholder engagement, ecosystem services, and field-scale monitoring of conservation effectiveness.

Mike Kucera (USDA-NRCS)
Agronomist at National Soil Survey Center in Lincoln from 2011 to present. Primary duties include national guidance on agronomy, soil health, agronomic soil interpretations, national soil erosion (land management, crops and equipment) database manager, ecological sites and many other agronomy related activities across the U.S. Forty years' experience with USDA-NRCS in May 2020. Past positions include: State Resource Conservationist (technical leader) Nebraska (8 years), State Agronomist and State Water Quality Specialist Nebraska, Area Resource Conservationist in Southwest Iowa, District Conservationist in Iowa and Nebraska, and Soil Conservationist & Range Conservationist Various Nebraska Field offices.

A. Marcelle Lewandowski (University of Minnesota)
Ann Marcelle Lewandowski is a Senior Research and Extension Coordinator for the University of Minnesota Water Resources Center. Her priorities are protecting soil and water resources on agricultural working lands, using watershed-based approaches, and collaborating with the private sector, government, and researchers to address water quality in agricultural landscapes. Current projects include coordinating the Minnesota Office for Soil Health.

Leif Olmanson (University of Minnesota)
Leif Olmanson is a Researcher at the University of Minnesota with over 20 years experience developing remote sensing applications to create temporally and spatially rigorous datasets of water and land resources for large area ecosystem characterization. He is particularly interested in developing field validated image processing methods implemented in automated geospatial analysis systems such as Google's Earth Engine and Minnesota Supercomputing Institutes super computers to gain a better understanding of the natural environment. He currently leads a team of researchers and computer scientists to build a near real-time water quality monitoring system for Minnesota's >10,000 lakes using satellite imagery to providing critical water quality information for lake management.

Will Osterholz (USDA Agricultural Research Service)
Dr. Will Osterholz is a soil scientist with the USDA-ARS Soil Drainage Research Unit in Columbus OH. Will specializes in nitrogen, phosphorus, and carbon cycling in subsurface tile drained agricultural landscapes. Current topics of research include characterizing N and P losses via tile drainage and surface runoff, soil nutrient stratification, soil health assessment.

Michelle Perez (American Farmland Trust)
Michelle is the Water Initiative Director for American Farmland Trust. She leads research and develops training materials on economic, water quality, climate, and social outcomes estimation tools. She leads the Soil Health Economic and Environmental Case Studies project with four other AFT regional staff and the former USDA NRCS Economist from New

York. Michelle is the Economics Team lead for AFT's new five-year On Farm CIG Trials project beginning January 2021. Michelle also collaborates with AFT's regional staff on watershed projects to quantify outcomes. AFT is a national non-profit organization that works to protect farmland, promote sound farming practices, keep farmers viable, and help new and historically disadvantaged farmers gain access to farmland. She has authored many reports while at AFT (e.g., water quality targeting success stories), World Resource Institute (e.g., nutrient trading and geographic cost-effectiveness targeting), and Environmental Working Group (e.g., state regulatory approaches to nutrient and sediment management). She has an undergraduate degree in biology and marine science from Occidental College and a PhD in environmental policy from the University of Maryland School of Public Policy.

Ross Wilson (Ausable Bayfield Conservation Authority, Ontario)
Ross Wilson was raised in southwestern Ontario on a mixed family farm, producing poultry, pork, beef, small grains, horse hay and blisters, while spending free time in the local creeks, forests and haylofts. He graduated with a Bachelor of Science degree from the University of Guelph and a Master of Science (Agriculture) degree from Dalhousie University/Nova Scotia Agricultural College. Ross has also become registered as a Certified Crop Advisor with 4Rs Nutrient Management Specialty. Ross has worked with various natural resource agencies in Canada (Conservation Authorities, Universities, provincial/federal ministries of Agriculture) over a 30 year period, most recently with the Ausable Bayfield Conservation Authority. As a long standing Professional Agrologist and Certified Crop Advisor, Ross's work has focused on the efficient use of soil and water resources on the agricultural landscape near the southeast shores of Lake Huron. Ross has shared results from this work with the Ontario farming community and audiences at various international Soil and Water Conservation Society conferences in Missouri, Texas, Kentucky, Wisconsin and Nebraska.