PANELISTS AND FACILITATORS

PANELISTS

K-12 Panel

David Bydlowski
Science Consultant, Wayne Regional Educational Services Agency
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In partnership with Andy Henry, also of WRESA, we coordinate the ICCARS Project (Investigating Climate Change and Remote Funding). It is funded through a two-year grant with NASA. Students and Teachers, in grades 8 – 12, are developing a working understanding of the science behind global climate change and its relationship to human activity, in particular its relationship to land-use and land-cover (LULC) changes on multiple scales through NASA data products and models. For more information, please visit www.resa.net/climatechange.

Tom Occhipinti
Environmental Education Coordinator, Michigan Department of Environmental Quality
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Tom is Michigan’s Environmental Education Coordinator located in the Department of Environmental Quality (DEQ). He is responsible for leading Michigan’s environmental education strategy. Through partnerships with state, federal, and local agencies, associations, and educational institutions, Tom works to promote increased understanding of the environment, natural resources, and the related sciences. He is the Department’s Coordinator of the DEQ Internship program.
Formerly Tom was the Education & Outreach Manager for the Environmental Assistance Division, directing the Division’s outreach efforts and educational programs, targeted mainly at Michigan companies and local governments. He also oversaw the management of the Clean Air Assistance Program. Tom was with the Department of Commerce from 1985 until the environmental services programs were transferred to the Department of Environmental Quality in 1995. In the Department of Commerce he was involved in the administration of a myriad of public sector consulting services to local communities. He is the former Director of the Center for Local Economic Competitiveness, and he worked in the Strategic Planning Division of the Public Service Commission.

Jane Rice
Geological Sciences, Michigan State University
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Jane’s research is in science education in the area of integrative science understanding for K-8 teachers. She currently has a NSF grant exploring the use of foundational big ideas to help future teachers understand the science concepts they have to teach. Environmental issues, including climate change, energy resources, and water resources, are often the focus in her research and teaching.
Jane earned a B.S. in biology from Aquinas College and a doctorate from MSU in physiology with an emphasis on environmental health. Her previous work includes investigating the effects of environmental toxins and light on human health and administering the environmental studies program at MSU.

College Panel

Jeff Andresen
Geography, Michigan State University
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Jeff Andresen is an associate professor of meteorology/climatology in the Department of Geography and the State Climatologist for Michigan. He obtained a Bachelor of Science degree from Northern Illinois University in the field of meteorology, and M.S. and Ph.D. degrees from Purdue University in the field of agricultural meteorology/climatology. Dr. Andresen currently serves as director of the Michigan Climatological Resources
Program, co-director of the Enviro-weather system, which supports agricultural pest, production, and natural resource management decision-making across Michigan, and administrator of the Michigan Automated Weather Network (MAWN), a network of automated weather stations designed to provide quality, detailed weather data to the state’s agricultural industry over the Internet. The primary focus of Andresen’s research has been the influence of weather and climate on agriculture, especially within Michigan and the Great Lakes Region.

Stephen Hamilton  
Zoology, Michigan State University  
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My principal research interests involve ecosystem ecology and biogeochemistry, with particular attention to aquatic environments and the movement of water through landscapes. I am especially interested in running waters, wetlands and floodplains. I also like to consider ecosystem processes at the landscape or watershed scale, and I prefer to do research that contributes to our understanding of environmental problems or improves our ability to manage ecosystems.

I am presently devoting much of my time to the study of various aspects of aquatic ecosystems in southern Michigan, including wetlands, streams, lakes, and watersheds. I also work on tropical ecosystems in South America and dryland river ecosystems in Australia.

Julie Libarkin  
Geological Sciences, Michigan State University  
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I am an Associate Professor at Michigan State University with a joint appointment in the Department of Geological Sciences and the Division of Science and Mathematics Education (DSME). I am also affiliated with the Center for Research on College Science Teaching and Learning (CRCSTL), MSU’s Cognitive Science Program, and MSU’s Environmental Science and Policy Program.

Ultimately, I hope to develop an empirical and theoretically consistent model for geocognition, a description of both the mechanisms by which novices gain understanding of geologic phenomena and the nature of working geological expertise.

Informal Education Panel

Dan Brown  
Research Associate, Great Lakes Integrated Sciences and Assessment (GLISA) Center and University of Michigan  
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Daniel’s primary role with GLISA is to synthesize climate data for natural resource managers, stakeholders, and decision makers. Daniel graduated from Michigan State University in 2007 with an M.S. in Nuclear Physics. He switched fields and completed a second M.S. degree in Atmospheric Science at Oregon State. His research at Oregon State examined the effects of microscopic atmospheric particles on the properties of deep convective clouds. After graduating, Daniel worked as a researcher for the Oregon Climate Change Research Institute. While there, he participated in the analysis of regional climate model output and engaged in climate science outreach.

Laura Florence  
Education Specialist, Michigan Sea Grant  
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Laura provides support and coordination for Michigan Sea Grant’s education programs. She works on the Great Lakes Lessons: Teaching with Great Lakes Data website, gives workshops and presentations for teachers, contributes educational content to Sea Grant communications and print materials, and assists Sea Grant extension educators as needed. Professional interests include: Connecting scientists and educators; inquiry-based science education; formal (K-12) and non-formal science curriculum; fish ecology; and Great Lakes coastal wetland ecology.

David Poulson  
Knight Center for Environmental Journalism, Michigan State University  
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David Poulson is the associate director of the Knight Center for Environmental Journalism at MSU and also editor of the online publication, Great Lakes Echo. He teaches environmental, investigative and computer-
assisted reporting to graduate and undergraduate students. He also organizes and teaches workshops that help professional reporters better cover the environment. In August 2008 he led a dozen reporters on a trip to Alaska to study and write about climate change. At MSU he also researches and experiments with alternative media forms including an environmental news aggregator and a citizen journalism effort that won national recognition from the Knight-Batten awards for innovations in journalism.

**FACILITATORS**

**K-12**

**Allison Rober**  
Zoology and Environmental Science and Policy Program, Michigan State University  
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I am currently a Ph.D. student at Michigan State University in the Department of Zoology studying environmental regulation of benthic algal structure and function in northern boreal wetlands. My research has examined the role of hydrology, grazing, nutrients, and light in regulating algal productivity and taxonomic composition in boreal wetlands within the Bonanza Creek LTER at the University of Alaska-Fairbanks. My research has contributed to an understanding of how algae will respond to environmental factors that are predicted to be altered by climate change processes. My interest in climate change education stems from my disciplinary research and I am proud to have been a part of organizing this symposium to bring together other individuals interested in climate change education.

**College**

**Jonathon Schramm**  
Teacher Education and Great Lakes Bioenergy Research Center, Michigan State University  
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I graduated with a PhD in Ecology and Evolution (2008) from Rutgers University. My dissertation research was on the role of community, landscape and historical factors in determining contemporary distributions of an invasive understory grass in eastern hardwood forests. At MSU, I've been a part of the BioDQC research project, studying the use of these tools in improving college student learning, as well as a project in a general ecology course that is looking at the role of classroom activities in forming patterns of principled reasoning in a larger lecture-based course. As part of Great Lakes Biofuels Research Center, I've also been looking at how students and teachers understand fundamental issues behind the science of biofuels, particularly global carbon cycling and climate change.

**Informal Education**

**Michael Beaulac**  
Executive Division, Michigan Department of Environmental Quality  
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Mike wears many hats, including:
- Department’s Information Technology Liaison
- Department’s Tribal Liaison for Michigan’s 12 federally recognized tribes, and
- (Under the Granholm Administration) Michigan Climate Action Plan facilitator, policy analyst and contributor
- Agency Lead for development of Michigan’s (MI Business One Stop) e-reporting
- He’s also on the Network Operations Board for governance of the EPA/State/Tribal National Environmental Information Exchange Network – a partnership to provide better access to high-quality environmental information for better decision making.
- When not at work, he’s busy with his family and co-chairing a local environmental nonprofit called the Friends of the Shiawassee River.