

FATE OF THE EARTH 2018



March 24, 2018
Environmental Science & Policy Program

cover art by Kaleb Williams

Schedule at a Glance



8 am -8:45 am Registration and Breakfast	Big Ten A
8:50 am - 9:00 am Rachel Croson, Dean of the College of Social Science Opening Remarks	Big Ten A
9:00 am - 9:50 am Dr. Bill Lynn, Clark University “Bringing Ethics to Wild Lives: Shaping Public Policy for Barred and Northern Spotted Owls”	Big Ten A
9:50 am - 10:00am Morning Break	Big Ten A and South Lobby
10:00 am - 10:50 am Morning Workshops	various rooms
11:00 a.m.- 11:50 a.m Magpie, folk music duo “Songs of the Earth”	Big Ten A
12:00 pm - 1:30 pm Lunch	Big Ten A
12:30 p.m. - 1:30 p.m. Poster Session	103AB

Schedule at a Glance

1:30 pm - 2:30 pm Big Ten A

Panel “Michigan’s Environment: Challenges for the Future”

Debra Furr-Holden, C.S. Mott Endowed Professor of
Public Health

Helen Taylor, The Nature Conservancy

Sean Hammond, deputy policy director, Michigan
Environmental Council

Alan Steinman, Grand Valley State University

Jared L. Talley, Sustainable Michigan Endowed Project

2:20 p.m. - 2:30 pm Big Ten A
and South Lobby

Afternoon Break

2:30 pm - 3:30 pm various
rooms

Afternoon Workshops

3:30 p.m. - 4:20 p.m. Big Ten A

Christy George, freelance journalist
“Fate of Our States”

4:30 p.m. - 5:00 p.m. 103AB

Reception and Poster Award Ceremony

Jinhua Zhao, ESPP Director



Environmental Science
& Policy Program
at Michigan State University

Fate of the Earth Morning Workshops

March 24th, 2018 10-10:50am



**"Bringing Ethics to Wild Lives:
Shaping Public Policy for Barred
and Northern Spotted Owls"** -
Dr. William Lynn, Clark University.

Location: Room 105B



**"Citizen's Climate
Lobby: Citizen Engagement and
Carbon Pricing Policy"** - *Jean Boucher.*

Location: 104B



"Connecting with Nature" -
*Jenny Mensch, Fenner Nature
Center.* Location: Room 105A



**"Deep Earth/Deep
Ocean: Singing to Save Our
Planet"** - *Magpie
Folk Music Group*
Location: Big Ten A



"Smart Gardening" - *Diane
Brown-Rtylewski, Michigan State
University Extension Specialist.*
Location: Willy



"How Do We Know Nature?" - *Jared
L. Talley & Shelbi Nahwilet Meissner,
Michigan State University.*
Location: 104A



"Touring the MSU RISE Program" -
*Dr. Laurie Thorp, Michigan State
University.*

Location: Bailey Hall



**"Getting Fired Up About
Climate Change"**
The Meridian Energy Team
Location: 106



**"What MSU is doing toward
Sustainability"** - *Dr. Wolfgang Bauer,
Michigan State University.*
Location: Heritage



Check out the full program
descriptions at <http://www.espp.msu.edu/events/fateoftheearth/2018/program.php>





Fate of the Earth Afternoon Workshops

March 24th, 2018 2:30 - 3:20pm



"Community Sustainable Living"
Carla Iansiti, Michigan State University
Location: Room 104A

"Connecting with Nature" -
Jenny Mensch, Fenner Nature
Center. Location: Room 105A



**"Defining Community
Supported Agriculture (CSA)"** - Degan
Gembarowski & Abigail Kuplicki, MSU
Student Organic Farm.
Location: 104B



"Fate of Our States" - Christy George,
Oregon Public Broadcasting
Location: Big Ten A



**"From Couch Potato to Change
Agent"** - Terry Link, Peace
Education Center,
Location: Willy

**"Michigan's Changing
Climate"** - B.J. Baule & GLISA.
Location: 105B



**"Nature Immersion Changes
Consciousness"** - MSU Student
Greenhouse Project..
Location: Heritage

"Nature/Environment and Yoga" -
Caitlin Kirby, Michigan State
University.
Location: 106



Check out the full Fate of the Earth program
descriptions at <http://www.espp.msu.edu/events/fateoftheearth/2018/program.php>



Plenary Speaker Biographies

Bill Lynn

Clark University



Bill Lynn is a research scientist in the George Perkins Marsh Institute at Clark University, and former Director of the Masters in Animals and Public Policy (MAPP) program at Tufts University. Schooled in ethics, geography, and political theory, his interdisciplinary approach examines why and how we ought to care for nature and society.

Sustainability is more than preserving a global elite's lifestyle or ensuring humanity's mere survival in an era of rampant environmental change. It is rather about sustaining the well being of people, animals, and nature across the planet, now and into the distant future. Sustainability needs, therefore, to be both scientifically and ethically sound. Its facts and values need to be transparent and accountable to society, while its goals must serve the good of the entire community of life.

With this understanding in mind, Bill explores the moral norms of ecological and social sustainability. He is particularly keen on public scholarship that brings academic insights to the wider public without unnecessary jargon or impenetrable theories. Some of the topics he addresses includes wolf recovery, outdoor cats and biodiversity, barred and northern spotted owls, the Canadian seal hunt, cosmopolitanism, the Earth Charter, precaution, rewilding, sustainability science, and urban ecology.

Christy George

Freelance journalist



Christy George has covered climate change and the environment for 20 years – for both radio and television. She’s worked for PBS-TV’s “History Detectives;” Marketplace Radio; Oregon Public Broadcasting, WGBH-TV; and the Boston Herald, and edits news for public radio reporters from Olympia, Washington to Salt Lake City, Utah.

She has won three Emmys, an Edward R. Murrow award, and a Gracie Allen award, and she shared in Marketplace’s team Columbia-duPont Silver Baton. She was a 1991 John S. Knight Journalism Fellow at Stanford University and serves on the board of directors of the Society of Environmental Journalists.

Magpie

Folk music duo

Since 1973, Terry Leonino and Greg Artzner have brought their unique sound and remarkable versatility to audiences everywhere, featuring traditional and vintage Americana to contemporary and stirring original compositions.



With two strong voices in harmony and superb instrumental arrangements, their sound is powerful and moving. Award-winning recording artists, singers, songwriters, musical historians, playwrights, actors and social activists, Terry and Greg are proud to be, as Pete Seeger said of them, “...more links in the chain”, dedicating their lives and music to leaving this world a better place.

Panel Speaker Biographies

Debra Furr-Holden

Michigan State University

Dr. Debra Furr-Holden is the Interim Director of the Division of Public Health and Director of the National Institute on Minority Health and Health Disparities (NIMHD)-funded Flint Center for Health Equity Solutions. She also serves as the MSU Co-Director of the Healthy Flint Research Coordinating Center.

She is an epidemiologist and classically trained public health professional with expertise in drug and alcohol dependence epidemiology, psychiatric epidemiology and prevention science.



Sean Hammond

Deputy Policy Director

Michigan Environmental Council

Sean Hammond helps MEC build and maintain relationships with lawmakers, stay abreast of new bills and legislative committee activities, and keep the organization's member groups informed about developments at the Capitol. A native of Pottersville, Mich., Hammond comes to MEC with experience working in the Legislature and state agencies. He held a legal externship with Michigan's Senate Majority Policy Office, where he provided Republican lawmakers with policy analysis and legal memos on proposed legislation. He also has interned with the Michigan Department of Agriculture and Rural Development, the office of Attorney General Bill Schuette and with state Sen. Rick Jones (R-Grand Ledge), who was then serving in the House.



Alan Steinman

Grand Valley State University

Dr. Alan Steinman is the director of the Robert B. Annis Water Resources Institute, located at Grand Valley State University. He received his PhD in Botany/Aquatic Ecology from Oregon State University in 1987 and has testified in front of the US House of Representative, Subcommittee of the Interior in December of 2015, regarding invasive species in the Great Lakes.



Jared L. Talley

Sustainable Michigan
Endowed Project



Jared L. Talley is a doctoral student in Philosophy at Michigan State University. In his doctoral program he is intent on studying the ways in which communities can help to govern their local natural resources. He has worked closely with state and federal resource agencies to further their community engagement practices and hopes to continue impacting effective and ethical management of our environment by promoting this community engagement in policy making

Helen Taylor

The Nature Conservancy

Helen Taylor is the State Director of the Nature Conservancy with more than 25 years of experience working in the environmental field and the Great Lakes, she has witnessed first-hand both the evolution of the conservation movement and the Conservancy itself. She added a holistic approach to the conservation during her tenure as Director as well as the consideration of health for the entire system, not just one component.



Workshop Biographies

Jeff Andresen

Jeff Andresen is Professor of Meteorology and Climatology in the Department of Geography, Environment and Spatial Sciences. An expert on the weather, especially as it relates to agriculture and its impact on agriculture production, Andresen serves as the state climatologist.

Afternoon Workshop: “Michigan’s Changing Climate” - Jeff Andresen, B.J. Baule & GLISA. Sit down with State Climatologist Jeff Andresen and B.J. Baule as they engage you in a hands-on workshop about the changing climate within the Great Lakes region along with a discussion on the actions GLISA is taking to help reduce climate change in the Great Lakes region.

Location: 104A

B.J. Baule

B.J. Baule is a doctoral student in the Geography program at Michigan State University with areas of interest in climatology and agriculture. Prior to his return to graduate study in Fall 2016, he worked as a climatologist with NOAA’s Great Lakes Integrated Sciences + Assessments (GLISA) and the University of Michigan Climate Center.

Afternoon Workshop: “Michigan’s Changing Climate” - Jeff Andresen, B.J. Baule & GLISA. Sit down with State Climatologist Jeff Andresen and B.J. Baule as they engage you in a hands-on workshop about the changing climate within the Great Lakes region along with a discussion on the actions GLISA is taking to help reduce climate change in the Great Lakes region.

Location: 104A

Wolfgang Bauer

Dr. Wolfgang Bauer is Professor of Physics and Astronomy at Michigan State University and he conducts his research mainly at the National Superconducting Cyclotron Laboratory (NSCL), where he has a dual appointment. Currently, he is a Senior Consultant in the Office of the Vice President for Administrative Services for MSU.

Morning Workshop: “What MSU is doing toward Sustainability” – Dr. Wolfgang Bauer, Michigan State University. Connect with Michigan State University distinguished professor, Dr. Wolfgang Bauer as he discusses his research on energy efficiency and how MSU is working to enable more renewable power sources on campus.

Location: Heritage

Jean Boucher

Jean Boucher is a former corporate Mechanical Engineer and Mexico/US Border Educator turned Environmental Sociologist. In his research, he focuses on the United States as he explores peoples’ environmental and political attitudes and their association with consumption behaviors. He is interested in lifestyle lock-in and the income-carbon relationship—the way people generally consume to their income—and those who deviate from these tendencies.

Morning Workshop: Citizen’s Climate Lobby: Citizen Engagement and Carbon Pricing Policy – Jean Boucher. The science is clear, climate change is real, human caused, and dangerous: humanity must act quickly against its causes. However, policy responses from the United States government are lacking. Since economists assert that a price on carbon is the most effective policy solution, Citizens’ Climate Lobby has taken to the task. In this interactive session, we will review the work of Citizens’ Climate Lobby: their carbon pricing proposal, forms of citizen engagement, and strategies to create political will.

Location: I04B

Diane Brown-Rytelwski

Diane Brown is an educator with the Michigan State University Extension specializing in hops production, agriculture, field crops, consumer horticulture, lawn & garden, community gardening, home gardening, landscaping, pest management and food and animal systems.

Morning Workshop: “Smart Gardening” - Diane Brown-Rytelwski, Michigan State University Extension Specialist. Meet with Diane to learn all about the campaign “Smart Gardening” through MSU Extension. Learn all about how to make smart choices in our backyard and leave this workshop with a “toolkit” of information to use at home!

Location: Willy

Carla Iansiti

Carla serves as a liaison between the RHS and the Michigan State sustainability office, MSU Surplus and Recycling, MSU Waste Management, MSU Infrastructure and Planning, and MSU Food stores. She also develops and oversees training programs for staff and students to implement sustainability standards.

Afternoon Workshop: “Community Sustainable Living” - Carla Iansiti, Michigan State University. Engage with MSU Residential and Housing Services Sustainability Officer, Carla Iansiti to hear firsthand the steps that are being taken to inform more students about sustainability and how they can contribute to helping make MSU’s campus “greener”!

Location: 104B

Caitlin Kirby

Caitlin is a PhD student in the Geocognition Research Laboratory working with Dr. Julie Libarkin. Her dissertation research explores environmental decision-making in different cultural spaces with a Theory of Planned Behavior framework. She teaches several yoga classes at MSU and around the Lansing area.

Afternoon Workshop: “Nature/Environment and Yoga” - Caitlin Kirby, Michigan State University. Caitlin Kirby will host a yoga workshop with a “nature/environment theme. All ages are welcome but it is particularly well-suited for elementary aged kids.

Location: 106

Terry Link

Terry Link is a Senior Fellow for the US Partnership for Education for Sustainable Development. He is also the President of Starting Now, LLC, a company geared to help businesses, government, organizations, educational institutions, and communities improve their sustainability potential.

Afternoon Workshop: “From Couch Potato to Change Agent” - Terry Link, Peace Education Center, US Partnership for Education for Sustainable Development and the Greater Lansing United Nations Association. Join board member & co-chair, Terry Link in a presentation and discussion about how you can become more involved in creating change within our own local community to positively impact generations to come.

Location: Willy

Jenny Mensch

Jenny Mensch is the program manager and volunteer coordinator at the Fenner Nature Center in Lansing. She received her Master's in Science in Environmental Education at Southern Oregon University in 2012. Prior to that, she completed an undergraduate degree in Conservation and Environmental Science at the University of Wisconsin-Milwaukee. Raised in northern Illinois, Jenny's passion for the environment developed through years of trips to the scenic Wolf River in Wisconsin.

Morning Workshop: "Connecting with Nature" – Jenny Mensch, Fenner Nature Center. Engage in a hands-on workshop to learn more about how you can connect with you and your family more easily to nature within our local community.

Location: Room 105A

The Meridian Energy Team

The Meridian Energy Team supports energy projects in the township of Meridian, just east of Michigan State University. Roger Eberhardt, Heidi Porter, John Sarver and LeRoy Harvey will be presenting a workshop aimed at homeowners interested in fighting climate change.

Morning Workshop: "Getting Fired Up About Climate Change" – Workshop with citizens who are taking steps toward 100% renewable goal in their community and in their personal homes. through energy efficiency, recycling, water, transportation, and renewable energy. **Location:** 106

Shelbi Nahwilet Meissner

Shelbi Nahwilet Meissner is a doctoral student in philosophy at Michigan State University with a graduate affiliation in American Indian and Indigenous Studies. Her areas of specialization are American Indian and Indigenous philosophy, feminist epistemology, and philosophy of language. Meissner's primary research concerns Indigenous language revitalization and questions about the relationships between Indigenous languages, knowledge systems, and power.

Morning Workshop: "How Do We Know Nature?" – Jared L. Talley & Shelbi Nahwilet Meissner, Michigan State University. Engage in an interactive presentation from Michigan State University PhD students Jared L. Talley & Shelbi Nahwilet Meissner as they discuss Western & Indigenous Ways of knowing the environment.
Location: Room 104A

Laurie Thorp

Laurie Thorp is director of the Residential Initiative on the Study of the Environment (RISE). Thorp holds a Ph.D. in Agricultural Education from Texas A&M University. Her doctoral research took her to the Lansing School District where she studied the cultural and educational implications of a schoolyard garden. She is a faculty member in the Department of Community Sustainability.

Morning Workshop: "Touring the MSU RISE Program" – Dr. Laurie Thorp, Michigan State University. RISE stands for the Residential Initiative for the Study of the Environment and is a living learning community located on Michigan State University's campus. Participate in a walking tour through Bailey Hall to see the different ways students within the program are getting involved to enhance their environmental knowledge & stewardship skills.
Location: Kellogg Center Lobby. NOTE: This tour will require you to walk a short distance.

How Can I Help?

Tips on reducing your carbon footprint

Written by Kim Wolske with contributions by Nate Geisler.

Transportation

- Take the bus
- Carpool
- Walk or bike
- Telecommute
- Plan and combine errands
- Don't idle
- Reduce highway driving by 5 mph
- Inflate your tires once a month

Household Energy

- Turn the heat down a few degrees and resist the urge to adjust it.
- Lower your heat 8 degrees F or more when sleeping or away from home.
- Save in the summer by using fans, turning air conditioning off or down.
- Use the energy-saver settings on your dishwasher
- Choose the best cooking method
- Wash laundry in cold water instead of hot
- Dry full loads of laundry or skip the dryer altogether

Household Energy (cont.)

- Turn water heater down
- Don't let water run continuously while hand-washing dishes
- Take shorter showers
- Install a low-flow showerhead
- Replace your incandescent light bulbs with compact fluorescent light bulbs.
- Turn off your computer at night
- Keep your fireplace damper closed
- Pull the plug or use a power strip
- Switch to LED holiday lights
- Get an energy audit
- Caulk, weatherize and weather-strip leaks
- Insulate and seal leaks to the attic
- Properly insulate walls
- Upgrade window or central A/C
- Upgrade to energy efficiency
- Upgrade your water heater
- Recycle old appliances

Food

- Buy locally grown food
- Buy organic
- Have a regular meatless meal
- Bring your own bag to grocery stores
- Compost your food scraps

for more information, go to www.a2gov.org/energy or contact the Energy Office at energy@a2gov.org

Environmental Science and Policy Program

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Director

Dr. Vlad Tarabara

Associate Director

Symposium Organizing Committee

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Sociology and ESPP

Dr. Julie Libarkin

Earth and Environmental Sciences

Stephen Vrla

Sociology and ESPP

Lin Liu

Earth and Environmental Sciences, and ESPP

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Jarek Schmidt

Jack Trebtoske

A special thanks to

Barbara J. Sawyer-Koch and Donald F. Koch

The annual Fate of the Earth Symposium is made possible through a generous endowment given to the Environmental Science and Policy Program by Barbara J. Sawyer-Koch and Donald F. Koch. Donald F. Koch is an MSU Professor Emeritus of philosophy and a nationally recognized scholar of the American philosopher John Dewey. Barbara J. Sawyer-Koch received her master's degree in social science from MSU in 1990 and served as a member of MSU Board of Trustees from 1980-1996.

Poster Presenters

Mohammed Alsanad Plant, Soil and Microbial Sciences

Christina Azodi, Plant Biology and ESPP

Nichole Bowman, Health and Human Services, University of Michigan-Dearborn

Olivia Davidson, Geological Sciences

Mary Beth Flores, Arts & Letters

Jianzhou Hen, Plant, Soil and Microbial Sciences

Charifa Hejase, Civil and Environmental Engineerer, ESPP

Etienne Herrick, University of Michigan - Environment

Prakash Jha, Crop and Soil Sciences

Yuanbo Li, Plant, Soil and Microbial Sciences

Lin Liu, Earth and Environmental Sciences, ESPP

Camille McCall, Environmental Engineering

Remington Moll, Fisheries & Wildlife

Matthew Neitman, Central Michigan University Department of Geography and Environmental Studies

Vidhya Ramalingam, Environmental Engineering

Lydia Whitbeck, University of Michigan Energy Institute

Poster Judges

Robert Richardson, Community Sustainability

Lucero Radonic, Anthropology and ESPP

Julie Libarkin, Earth and Environmental Sciences

Wei Zhang, Crop, Soil and Microbial Science and ESPP

Joe Hamm, Criminal Justice and ESPP

Laura Schmitt Olabisi, Community Sustainability and ESPP

Volodymyr Tarabara, Civil and Environmental Engineering and ESPP

Kyla Dahlin, Geography, Environment and Spatial Sciences

Erin Dreelin, Fisheries and Wildlife and ESPP

Annick Anctil, Civil and Environmental Engineering

Hosts

Dr. Thomas Dietz Sociology and ESPP

David Poulson, Knight Center for Environmental Journalism

Stephen Vrla, Sociology and ESPP

Fate of the Earth is proud to present the work of these student artists both throughout our event and in this program:

Ashlynn Zwickle, Kindergarten	Glenclair	Simon Grund, 6th	Williamston Middle
Nora Rioux, 4th	Hutchings Elementary	Lauren Schafer, 6th	Williamston Middle
Kaleb Williams, 5th	Cole Academy	Emma Reynolds, 9th	Williamston High
Mia Dixon, 3rd	Explorer Elementary	Kathleen Stattelmann, 12th	Williamston High
Teddy Weber, 2nd	Discovery Elementary	Carter Gough, 12th	Grand Ledge High
Tyler Schneider, 2nd	Discovery Elementary	Roberto Cervantes	J.W. Sexton High
Faye Hollosy, 2nd	Discovery Elementary	Miracle Yang	J.W. Sexton High
Connor Grabowski, 1st	Discovery Elementary	Anica Saint-Jean	J.W. Sexton High
Madeline Sandborn, 1st	Discovery Elementary	Aanchaljot Kaur Sran, 11th	Williamston High
Cora Sicilliao, 1st	Discovery Elementary	Mei Kiengsiri, freshman	MSU
Delia Reed, 1st	Discovery Elementary	Kim Staples, junior	MSU
Reese Langdon, 2nd	Discovery Elementary	Alexis S Pascaris, senior	MSU
Ian Gillespie, 2nd	Discovery Elementary	Erica Olivarez, senior	MSU
Avery Turner, 1st	Discovery Elementary	Ian Deatrck, junior	MSU
Wheldon D'Souza, 1st	Discovery Elementary	Rebecca Minardi, graduate student	MSU
Chloe Lenkowski, 1st	Discovery Elementary		
Ruby Tolbert, 1st	Discovery Elementary		
Noah Bazil, 2nd	Discovery Elementary		
Colton Kolka, 2nd	Discovery Elementary		
Sam Gorsline, 1st	Discovery Elementary		
Abby Steinke, 1st	Discovery Elementary		
Violet Peters, 1st	Discovery Elementary		
Ava Riedel, 1st	Discovery Elementary		
Alexis Orr, 1st	Discovery Elementary		
Jaxton King, 1st	Discovery Elementary		
Marissa Radebach, 1st	Discovery Elementary		
Silas Fritz, 1st	Discovery Elementary		
Madeline Niederquell, 3rd	Explorer Elementary		
Isabel Rockafellow, 5th	Explorer Elementary		
Alondra Quinteros, 4th	Explorer Elementary		
Tess Donahue, 3rd	Explorer Elementary		
Paige Lewis, 4th	Explorer Elementary		
Abby Branna, 3rd	Explorer Elementary		
Annie Lippe, 3rd	Explorer Elementary		
Harper Tolber, 3rd	Explorer Elementary		
Eliana Hackett, 5th	Explorer Elementary		
Vayla Chapman, 4th	Explorer Elementary		
Max Convey, 1st	Discovery Elementary		
Maya McCullen, 3rd	Explorer Elementary		
Evelyn Taylor, 5th	Kinawa 5/6		

