

Matthew Houser

Curriculum Vitae



Applied Scientist and
Regenerative Agriculture
Fellow
The Nature Conservancy and
University of Maryland
Center for Environmental
Sciences
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Websites

Institutional

<https://eri.iu.edu/who-we-are/researchers/matthew-houser.html>

Research Gate

https://www.researchgate.net/profile/Matthew_Houser

Personal

Matthewkhouser.com

EMPLOYEMENT

2021-present

Applied Social Scientist and UMCES Regenerative Agriculture Fellow
The Nature Conservancy Maryland/DC Chapter and University of Maryland Center
for Environmental Sciences

2018-2021

Faculty Fellow and Assistant Research Scientist, Environmental Resilience Institute
Adjunct Assistant Research Scientist, Department of Sociology
Affiliate, School of Public and Environmental Affairs
Indiana University

2018

Instructor, Department of Sociology, Michigan State University

2017-2018

Research Assistant, Kellogg Biological Station Long Term Ecological Research
Midwestern row crop survey
Department of Sociology and Kellogg Biological Station
Michigan State University
PIs: Sandra Marquart-Pyatt and Scott Swinton

2014- 2017

Research Assistant, A social-ecological analysis of nitrogen in agricultural systems of
the upper Midwest
Department of Sociology and Kellogg Biological Station
Michigan State University
PI: Diana Stuart

2015

Research Assistant, Training the next generation of environmental scientists: a systems approach to understanding human-impacted landscapes
Department of Sociology and Kellogg Biological Station
PIs: Jennifer Lau and Sandra Marquart-Pyatt

2013

Apprentice Farmer, Plowshare Produce, Huntington, Pennsylvania.

2012- 2013

Dialogue Facilitation Consultant, World in Conversation, The Pennsylvania State University

2011- 2013

Dialogue Facilitator, World in Conversation, The Pennsylvania State University

2010-2011

Academic Tutor, The Morgan Center, The Pennsylvania State University

EDUCATION

2018

Ph.D. Michigan State University, Sociology
Dissertation: Nitrogen fertilizer management in the context of the Midwestern corn agro-ecological system: An environmental sociological analysis
Committee: Sandra Marquart-Pyatt (Chair), Diana Stuart, Aaron McCright, Scott Swinton, and Wynne Wright

2015

M.A. Michigan State University, Sociology

2013

B.P. The Pennsylvania State University, Interdisciplinary Studies (Focus: Nutrition, Food, & Sociology)
Summa cum laude

RESEARCH INTERESTS

Political-Ecology

Environmental Justice

Agricultural Systems

Public Opinion/Views

Climate Change

Social-Ecological Systems

CURRENT RESEARCH PROJECTS

CNH2-L Resilience to drought or a drought of resilience? How farmers' adaptive management strategies might limit resilience provided through ecological adaptation. Funded by *National Science Foundation Dynamics of Integrated Socio-Environmental Systems* (Award: BCS-2009125)

Role: Co-PI

Hoosier Life Survey 2.0: Life under duress. Funded by *IU Grand Challenge: Prepared for Change*.

Role: PI (with Eric Sandweiss)

Kellogg Biological Station Long Term Ecological Research Farmer Panel Survey. Funded by *The National Science Foundation Long Term Ecological Research Grant*.

Role: Collaborator

What will Midwestern aquatic invasions look like in a changing climate? Funded by *IU Grand Challenge: Prepared for Change* and *Minnesota Aquatic Invasive Species Research Center*

Role: Co-PI

REFEREED PUBLICATIONS (* denotes equal contributions)

In preparation

Houser, Matthew, Landon Yoder, James Farmer, Analena Bruce, and Abigail Sullivan. How are farmers preparing for future flood risks? Evidence from Indiana's Lower Wabash River Basin. *Society and Natural Resources*.

In review

Houser, Matthew, Beth Gazely, Heather Reynolds, Elizabeth Grennan Browning, Eric Sandweiss, & James Shanahan (**Revise and resubmit**). Public support for local adaptation policy: The role of social-psychological factors, perceived climatic stimuli, and social structural characteristics. *Global Environmental Change*.

Houser, Matthew. Nearly 40% of interviewed farmers exceeded profitable nitrogen fertilizer rates, with many reporting that over-application is a market impossibility or in their financial interest. *Case Studies in the Environment*.

2021

Valliant, Julia, Analena Bruce, **Matthew Houser**, Stephanie Dickinson, & James Farmer (2021). Do farmers' outlooks on adaptive practices have anything to do with climate change? The case of product diversification in the U.S. Corn Belt. *Frontiers in Climate*. <https://doi.org/10.3389/fclim.2021.662847>

Houser, Matthew (2021). Does adopting a nitrogen best management practice lead to less nitrogen fertilizer use? *Agriculture and Human Values*. <https://doi.org/10.1007/s10460-021-10227-9>

Houser, Matthew*, Abigail Sullivan*, Tara Smiley, Ranjan Muthukrishnan, Elizabeth Grennan Browning, Adam Fudickar, Pascal Title, Jason Bertram, & Maria Whiteman (2021). What fosters the success of a transdisciplinary environmental research institute? Reflections from an interdisciplinary research cohort. *Elementa: Science of the Anthropocene* 9: 1. DOI: <https://doi.org/10.1525/elementa.2020.00132>.

Yoder, Landon, **Matthew Houser**, Analena Bruce, Abigail Sullivan, & James Farmer (2021). Are climate risks encouraging cover crop adoption among farmers in the southern Wabash River Basin? Implications for policy. *Land Use Policy* 102: 105268.

2020

Houser, Matthew, Ryan Gunderson, Diana Stuart & Riva C. H. Denny (2020). How farmers “repair” the industrial agricultural system. *Agriculture and Human Values* 37(4): 983-997

Reimer, Adam, **Matthew Houser** & Sandra Marquart-Pyatt (2020). Farming decisions in a complex and uncertain world: Nitrogen management in Midwestern corn agriculture. *Journal of Soil and Water Conservation* 75(5): 617-628.

Houser, Matthew & Diana Stuart (2020). An accelerating treadmill and overlooked contradiction in industrial agriculture: Climate change and nitrogen fertilizer. *Journal of Agrarian Change* 20: 215-237

Gunderson, Ryan, Diana Stuart, & **Matthew Houser** (2020). A political-economic theory of relevance: Explaining climate change inaction. *Journal for the Theory of Social Behaviour* 50(1): 42-63

2019

Houser, Matthew, Ryan Gunderson, & Diana Stuart (2019). Farmers’ perceptions of climate change in context: Toward a political economy of relevance. *Sociologia Ruralis* 59(4): 789-809

- Featured in: Oates, Bryce (2019). Farmers’ experience of climate change doesn’t alter politics, study says. *The Daily Yonder*.
- Featured in: Jones, Chris (2019). Cry me a Racoon River. *The Science of Improving Iowa’s Water Quality Blog Post Series*, University of Iowa.
- One of *Sociologia Ruralis*’s most downloaded articles of the year

Houser, Matthew, Sandra Marquart-Pyatt, Riva Denny, Adam Reimer, & Diana Stuart (2019). Farmers, information, and nutrient management in the US Midwest. *Journal of Soil and Water Conservation* 74(3), 269-280

Marquart-Pyatt, Sandra, Chloe Qian, **Matthew Houser**, & Aaron McCright (2019). Climate change views, energy policy preferences, and intended actions across welfare state regimes: Evidence from the European Social Survey. *International Journal of Sociology* 49(1), 1-26

Denny, Riva, Sandra Marquart-Pyatt, & **Matthew Houser** (2019). Understanding the past and present and predicting the future: Farmers’ use of multiple nutrient best management practices in the Upper Midwest. *Society and Natural Resources* 32(7), 807-826

2018

Stuart, Diana & **Matthew Houser** (2018). Producing compliant polluters: Seed companies and nitrogen fertilizer application in US corn agriculture. *Rural Sociology* 83(4), 857-881

- Featured in: *Nature News & Views* review. Bellamy, Angelina S. (2018). Profit and hegemony in agribusiness. *Nature Plants*, 4(11), 867.
- One of *Rural Sociology's* most downloaded articles in 2018
- One of *Rural Sociology's* most cited articles in 2018-2019

Houser, Matthew, Riva Denny, Adam Reimer, Sandra Marquart-Pyatt, & Diana Stuart (2018). Strategies for enhancing University Extension's role as an agricultural information source. *Journal of Extension* 56(6): 6FEA5.

Houser, Matthew (2018). Who framed climate change? Identifying the how and why of Iowa corn farmers' framing of climate change. *Sociologia Ruralis* 58(1), 40-62

Stuart, Diana, Riva Denny*, **Matthew Houser***, Adam Reimer,* & Sandra Marquart-Pyatt (2018). Farmers' selection of sources of information for nitrogen management in the US Midwest: Implications for environmental programs. *Land-Use Policy* 70, 289-297

2017

Houser, Matthew, Diana Stuart, & Michael Carolan (2017). Is seeing believing? Applying a realist framework to examine agriculture and climate change. *Environmental Sociology* 3(4), 321-336

BOOKS/EDITED VOLUMES

In Press

Houser, Matthew (Invited chapter lead), James Farmer, Elizabeth Grennen-Browning, & John Baeten. *Hoosier agriculture in a changing climate: Our food and farming system's history, contemporary challenges, and opportunities to sow resilience*. In Janet McCabe, Ellen Ketterson, James Shanahan, Gabe Filippelli, Kimberly Novick and Eva Allen (Eds.) (In Press). *Climate Change and Resilience: Lessons for Hoosiers and Beyond*. *Indiana University Press*

Reynolds, Heather, **Matthew Houser**, Samantha Hamlin, Dana Habeeb, Jeffrey Wilson, Daniel Myers, & Gabriel Filippelli. *Weak versus strong resilience: The built environment and green infrastructure*. In Janet McCabe, Ellen Ketterson, James Shanahan, Gabe Filippelli, Kimberly Novick and Eva Allen (Eds.) (In Press). *Climate Change and Resilience: Lessons for Hoosiers and Beyond*. *Indiana University Press*

Ellen Ketterson, Adam Fudickar, Alex Jahn, Keith Clay, Geoffrey Brown, Jennifer Lau, Daniel Becker, **Matthew Houser**, Allison Byrd, & Sarah Wanamaker. *Biodiversity and species movements*. In Janet McCabe, Ellen Ketterson, James Shanahan, Gabe Filippelli, Kimberly Novick and Eva Allen (Eds.) (In Press). *Climate Change and Resilience: Lessons for Hoosiers and Beyond*. *Indiana University Press*

In preparation

Marquart-Pyatt, Sandra T. & **Matthew Houser** (Under contract). Handbook of research methods in climate change and the social sciences. *Edward Elgar Publishers*

PUBLICATIONS FOR PUBLIC AUDIENCES (*denotes equal contributions)

2021

Houser, Matthew, Eric Sandweiss, Beth Gazley, Elizabeth Grennan Browning, Heather Reynolds, & James Shanahan (June 29th, 2021). Examining the impact of 2020 on Hoosiers: COVID, Black Lives Matter, and Climate Change in Indiana. *Environmental Resilience Institute*. Available at: <https://eri.iu.edu/tools-and-resources/hoosier-life-survey/hls-examining-the-impact-of-2020-on-hoosiers.pdf>.
Featured in: *Indiana Environmental Report* and *The Herald Times*.

Houser, Matthew & Michael Hamburger (April 5th, 2021). Save Indiana's remaining wetlands, help halt SB 389. *News and Tribune*. Available at: https://www.newsandtribune.com/opinion/letter-ending-wetlands-protections-endangers-ecosystems/article_c49ab31c-9634-11eb-a815-13d9aeecac0.html

Houser, Matthew & Michael Hamburger (April 1st, 2021). Save Indiana's remaining wetlands, help halt SB 389. *South Bend Tribune*. Available at: https://www.southbendtribune.com/news/opinion/viewpoint/viewpoint-protect-indiana-s-wetlands-for-generations-of-future-hoosiers/article_fcd2a88e-9166-11eb-ab8e-c3ab31bfabc3.html

Ellen Ketterson, Alex Jahn, & **Matthew Houser** (March 30th, 2021). Ending Indiana wetlands safeguards hurts wildlife. Here's how it also hurts us. *Indy Star*. Available at: <https://www.indystar.com/story/opinion/2021/03/30/indiana-wetlands-safeguards-protect-wildlife-bill-389/4797644001/>

Houser, Matthew & Michael Hamburger (March, 24th, 2021). Save Indiana's remaining wetlands, help halt SB 389. *The Herald Times*. Available at: https://www.hoosiertimes.com/herald_times_online/opinion/columns/column-save-indianas-remaining-wetlands-help-halt-sb-389/article_52da48c8-880b-11eb-af15-135c1cfe31c7.html

2020

Houser, Matthew* & Eric Sandweiss* (October 3rd, 2020). Viewpoint: The survey says: South Bend is uncertain about climate change. *South Bend Tribune*. Available at: https://www.southbendtribune.com/news/opinion/viewpoint/viewpoint-the-survey-says-south-bend-is-uncertain-about-climate-change/article_708d0c0c-fe68-11ea-9619-4beac85bce41.html

Houser, Matthew* & Eric Sandweiss* (September 23rd, 2020). Planning for change: IU's statewide survey finds area residents making some concessions to climate. *The Journal Gazette*. Available at: <https://www.journalgazette.net/opinion/columns/20200923/planning-for-change>

Houser, Matthew, Eric Sandweiss, Beth Gazley, Elizabeth Grennan Browning, Heather Reynolds, & James Shanahan (August 27th, 2020). The Hoosier Life Survey: Metropolitan Reports. *Environmental Resilience Institute*. Available at:

<https://eri.iu.edu/tools-and-resources/hoosier-life-survey/metro-reports/index.html>

- Featured, with associated interview, in the *Indy Star* (front page story); *The Chicago-Tribune*, *The Herald Times*; *Evansville Courier & Press*; *Indiana Environmental Reporter*.

Sandweiss, Eric & **Matthew Houser** (August 21st, 2020). Hot enough for you? The politics of discussing Hoosier climate change. *Indiana Business Journal*. Available at: <https://www.ibj.com/articles/the-politics-of-discussing-hoosier-climate-change>

- Featured in *IU Research in the News*. Available at: <https://research.impact.iu.edu/research-news/podcasts/index.html>

Matthew Houser & Eric Sandweiss (July 14th, 2020). Hoosiers of color more likely to be affected by summer heat, agree that climate change is harming people now.

Environmental Resilience Institute News. Available at: <https://eri.iu.edu/news-and-events/news/archive/2020/20200714-hoosiers-of-color-more-likely-to-be-affected-by-summer-heat-agree-climate-change-is-harming-people.html>

- Research featured, with associated interviews, in: *Indiana Environmental Reporter*; *Great Lakes Now*.

Houser, Matthew, Eric Sandweiss, Beth Gazley, Elizabeth Grennan Browning, Heather Reynolds, & James Shanahan (May 29th, 2020). The Hoosier Life Survey: Politics and climate change at the crossroads. *Environmental Resilience Institute*.

- Report featured, with associated interviews, in: *The Indiana Daily Student*; *Indiana Environmental Reporter*; *E&E News Reporter*.

Houser, Matthew*, Eric Sandweiss*, Beth Gazley, Elizabeth Grennan Browning, Heather Reynolds, & James Shanahan (April 20th, 2020). The Hoosier Life Survey: Assessing Hoosier preparedness for environmental change, extreme weather and other risks. *Environmental Resilience Institute*. Available at: <https://eri.iu.edu/tools-and-resources/hoosier-life-survey/hls-summary-report.pdf>

- Report featured by: *All IN* (broadcast across all Indiana NPR stations), *The Indy Star*; *Indiana Environmental Reporter*; *The Herald Times*, *WFHB Community Radio*, among others.

Grennan Browning, Elizabeth and **IU Research Fellows** (April 20th, 2020). Earth Day in the coronavirus era: Can resilience thinking provide a way forward? (commentary). *Mongabay*. Available at: <https://news.mongabay.com/2020/04/earth-day-in-the-coronavirus-era-can-resilience-thinking-provide-a-way-forward/>

2019

Houser, Matthew (September 5th, 2019). How many Americans believe in climate change? Probably more than you think, research in Indiana suggests. *The Conversation*. Available at: <https://theconversation.com/how-many-americans->

believe-in-climate-change-probably-more-than-you-think-research-in-indiana-suggests-118501

- Picked up by over 20 media outlets, including: *US News and World Report*, *The Houston Chronicle*, *The San Francisco Chronicle*, *The National Interest*.
- Reads as of 5/1/20: 42,552
- Featured in: Nash, Stephen (2019). Nash: Climate Change, Lynchburg's Heat and Silence. *The News & Advance*. Available at: https://www.newsadvance.com/opinion/columnists/nash-climate-change-lynchburg-s-heat-and-silence/article_79e89cfe-a1c7-5b34-80f7-b2ae1561f739.html

2018

Sullivan, Abigail & **Matthew Houser** (November 30th, 2018). Addressing climate change through degrowth: It may be less contentious than you think. *Common Dreams*. Available at:

<https://www.commondreams.org/views/2018/11/30/addressing-climate-change-through-degrowth-it-may-be-less-contentious-you-think>

Houser, Matthew & Andrea Webster (October 22nd, 2018). Many Midwesterners will likely never believe in climate change. Here's how to encourage them to act anyway. *The Conversation*. Available at: <https://theconversation.com/many-midwesterners-will-likely-never-believe-in-climate-change-heres-how-to-encourage-them-to-act-anyway-105199>

- Picked up by over 16 media outlets, including: *The Chicago Tribune*, *San Francisco Chronicle*, *Seattle Post-Intelligencer*.
- Reads as of 5/1/20: 5,529
- Featured in Suarez, Cyndi (2018). How to craft a narrative for social change: A climate example. *Non-Profit Quarterly, Climate Change and Environment*. Available at: <https://nonprofitquarterly.org/how-to-craft-a-narrative-for-social-change-a-climate-example/>

GRANTS, AWARDS, ENDOWMENTS AND FELLOWSHIPS

(* denotes equal contributions; underline denotes undergraduate student)

TOTAL AWARDED TO DATE (as PI, co-PI or Direct Recipient): \$2,124,464

Grants

External, In Review

2021

Ketterson, Ellen, David Polly, Peter Marra, Dan Becker, Alex Jahn, Geoffrey Brown, Mike Wade, Jennifer Lau, Adam Fudickar, Kimberly Novick, J. Adam Scribner, James Shanahan, **Matthew Houser (Key Person)**, Armin Moczek, Spencer Hall. BII-Implementation: Center on Migratory Birds: Responding to environmental change. *National Science Foundation Biology Integration Institute* (\$10 million requested).

Novick, Kimberly, Jennifer Tank, Todd Royer, Landon Yoder, & **Matthew Houser**. DISES-L Socio-ecological dynamics determining the climate mitigation and adaptation potential of midwestern US agroecosystems. *National Science Foundation Dynamics of Integrated Socio-Environmental Systems* (\$1,599,329 requested).

Fudickar, Adam, Ellen Ketterson, Alex Jahn, Allison Byrd, & **Matthew Houser**. Center for the Conservation of Migratory Birds (*Proposal to fund a research center*; seeking \$2,650,313).

External, Funded

2020

Lau, Jennifer, **Matthew Houser**, Elizabeth Grennan Browning, Sandra Marquart-Pyatt, Sarah Evans, & Jay Lennon. CNH2-L Resilience to drought or a drought of resilience? How farmers' adaptive management strategies might limit resilience provided through ecological adaptation. *National Science Foundation Dynamics of Integrated Socio-Environmental Systems* (Award: BCS-2009125; \$1,590,000 requested; *Funded at \$1,431,000*).

2019

Muthukrishnan, Ranjan, Abigail Sullivan, & **Matthew Houser**. What will Midwestern aquatic invasions look like in a changing climate? *Minnesota Aquatic Invasive Species Research Center* (\$39,000 requested; *Funded in full*)

External, Not Funded

2021

Novick, Kimberly, Todd Royer, Jennifer Tank, Janet McCabe, Adam Scribner, Mallory Barnes, Landon Yoder, **Matthew Houser**, Carl Bernacchi, Danica Lombardozi, John Baker, Tim Griffis. Cover crops as a natural climate solution for Midwestern agroecosystems. *United States Department of Agriculture, Sustainable Agricultural Systems* (preproposal submitted; *not encouraged*).

Ketterson, Ellen, **Matthew Houser**, Abigail Sullivan, & Whitney Schlegel. Mitigating the risk of black vulture (*Coragyps atratus*) predation to cattle farmers: Identifying risk factors and effective management techniques. *NRC-Sustainable Agriculture Research and Education Program* (preproposal submitted; *not encouraged*).

2020

Muthukrishnan, Ranjan, Abigail Sullivan, Ryan Noe, Nick Phelps, Przemyslaw G. Bajer, **Matthew Houser (Key personnel)**. A social-ecological systems approach to aquatic invasive species decision-making. *National Science Foundation Dynamics of Integrated Socio-Environmental Systems* (\$1,599,000 requested; *not funded*)

Houser, Matthew & Eric Sandweiss. Risk, resilience, and living through crisis: Assessing how a global pandemic shifted public concern about climate change. *Rapid Responses Grants on COVID-19 and the Social Sciences, The Social Science Research*

Council (\$5,000 requested; *Not funded*).

Houser, Matthew, Sandra Marquart-Pyatt, & James Farmer. COVID-19 and Midwest Agriculture: Implications for the farm economy, food supply and farmers' health. *National Science Foundation Rapid Response Research Program* (Pre-proposal submitted; *Not Funded*).

2018

Shanahan, James & **Matthew Houser**. Wind turbine siting: Problems or advantages? A case study in Jasper County, Indiana. *Next Era Energy*. (\$50,000 requested; *Unable to be funded as organized public resistance blocked turbine siting project*)

Internal, Funded

2021

Burnhans, Molly & Matthew Houser. Climate change risk perceptions: How can we better understand, engage with, and prepare rural populations? *Sustainability Research Development Grants* (\$3,000 requested; *Funded in full*).

Howard, Mia, Jennifer Lau, **Matthew Houser**, Elizabeth Grennan Browning, Maria Whiteman, & Sophia Heymans. Visualizing the unseen microbial actors of environmental resilience through art. *Indiana University Grand Challenge Prepared for Environmental Change's Call for High Impact Ideas* (\$6,900 requested; *funded at \$6,000*).

Houser, Matthew, Elizabeth Grennan Browning, & Jennifer Lau. Breaking New Ground: Teaching Climate Change Solutions Through Food, Farms and Soils. *Indiana University Grand Challenge Prepared for Environmental Change's Call for High Impact Ideas* (\$21,000 requested; *funded at \$3,000*).

2020

Houser, Matthew. Hoosier Life Survey 2.0: Life Under Duress. *Sustain IU and Indiana University's Integrated Program in the Environment's Sustainability Scholars program* (Funds an Undergraduate Research Assistant for the Fall and Spring Semesters; *Awarded*)

Houser, Matthew. Resilience to Drought or a Drought of Resilience? *Sustain IU and Indiana University's Integrated Program in the Environment's Sustainability Scholars program* (Funds an Undergraduate Research Assistant for the Fall and Spring Semesters; *Awarded*)

Houser, Matthew, Eric Sandweiss, Beth Gazely, Elizabeth Grennan Browning, Heather Reynolds, & James Shanahan. Hoosier Life Survey 2: Indiana Life Under Duress. *IU Grand Challenge: Prepared for Change* (Requested \$40,000; *Funded in Full*)

2019

Houser, Matthew. Hoosier Life Survey: Assessing public perceptions of climate change and support for climate resilience across Indiana communities. *Sustain IU and Indiana University's Integrated Program in the Environment's Sustainability Scholars program* (Funds an Undergraduate Research Assistant for the Fall and Spring Semesters; *Awarded*)

Houser, Matthew. Midwest farmers' views of, experiences with and responses to climate change: The Farmer Panel Survey. *Sustain IU and Indiana University's Integrated Program in the Environment's Sustainability Scholars program* (Funds an Undergraduate Research Assistant for the Fall and Spring Semesters; *Awarded*)

Houser, Matthew, Jennifer Lau, & Elizabeth Grennan Browning. Resilience to drought or a drought of resilience? How farmers' adaptive management strategies might limit resilience provided through ecological adaptation. *Indiana University Grand Challenge Prepared for Environmental Change* (\$174,890 requested; *Funded at \$31,173--declined*).

Muthukrishnan, Ranjan Abigail Sullivan, & **Matthew Houser.** What will Midwestern aquatic invasions look like in a changing climate? *Indiana University Grand Challenge Prepared for Environmental Change* (\$333,417 requested; *Funded at \$113,601*).

Awards, Endowments and Fellowships

2020

Indiana Department of Environmental Management Governor's Award for Environmental Education and Outreach. *Awarded to the Educating for Environmental Change Program* (**Role: Team Member/Annual Presenter**)

2018

Environmental Resilience Institute Fellowship, Indiana University (\$425,000)

2018

Mother nature, nitrogen fertilizer, and Michigan agriculture: Farmer survey, The Graduate School Research Enhancement Award, Michigan State University (\$4,500)

Landscape simplification and the drivers of Midwestern farm size increases, Kellogg Biological Station Long-Term Ecological Research Program Research Experiences for Undergraduates Program (Not Funded)

2017

A comparative analysis of Michigan farmers' and the general public's climate change views, Michigan State University Institute for Public Policy's Social Research's State of the State Survey Award for Doctoral Students (\$14,000)

Farmer fertilizer use and climate change: a social-ecological systems approach, Kellogg Biological Station Long-Term Ecological Research Program Summer Research Fellowship for Long-term Ecological Research (\$7,000)

Reacting to biophysical climate change: Michigan corn farmers' beliefs, perceptions and actual nitrogen fertilizer use, Charles P. and Linda A. Thompson Endowment (\$4,400)

Graduate Office Fellowship Award, Michigan State University (\$4,400)

2016

Department of Sociology Teaching Workshop Instructor Award (\$1,100)

Graduate Office Fellowship Award, Michigan State University (\$2,200)

2015

Graduate Office Fellowship Award, Michigan State University (\$740)

2014

Rural Sociological Association Sociology of Agriculture and Food Research Interest Group Outstanding Student Paper Award

Conference Travel Funding, Michigan State University (\$350)

TEACHING AND MENTORSHIP

Instructor

2018

Social inequality, Department of Sociology, *Michigan State University* (200 level, elective course; 40 undergraduate students in total).

2013

Advanced dialogue facilitation, Department of Sociology, *The Pennsylvania State University* (Co-Instructor: Laurie Mulvey).

Curriculum Development

2020

Learning to think like a mountain: Insights toward solving environmental problems, *Department of Biology, Indiana University* (3 credit course, BIO L104; created with Jennifer Lau).

- Selected to be featured as a 2021 Indiana University [Themester Course](#)

2018

Social inequality, *Department of Sociology, Michigan State University* (3 credit online course).

Guest Lectures

2020

Farm Bill Conservation Programs in: Agriculture, Environment and Governance (V450/550), *School of Public and Environmental Affairs, Indiana University*

The Problem of Surplus in: Agriculture, Environment, and Governance (V450/550), *School of Public and Environmental Affairs, Indiana University*

Seminars (Academic)

2020

Addressing agricultural nutrient pollution from a social-ecological system's framework. *Indiana University's Youth Environmental Leadership Summit*, Spring (Cancelled due to COVID).

2019

Facilitating group dialogues: Tips and Techniques for Success, *Environmental Resilience Institute, Indiana University* (Instructor and developer)

2018

Social science research in agro-ecological systems: A practical methods guide, *Kellogg Biological Station Long Term Ecological Research Site, Michigan State University* (Instructor and primary developer)

Invited Seminars (Public)

2019

Polling and public perceptions of teaching climate change. *The IU / WonderLab Summer Science Institute on Teaching Climate Change*, July 11, Bloomington, IN. *presented to primary school teachers on public opinion on climate change in *Indiana*

2018

Communicating climate change: How to engage climate skeptics. *Ohio Kentucky-Indiana Sustainability Director Network*, December 14, Zoom seminar.

Mentorship

2021-

Rachel Irvine (Lead Research Technician on *CNH2-L Resilience to drought or a drought of resilience* project)

2020-

Molly Burhans (Undergraduate, Indiana University, Sustainability Scholar Funded Research Assistant)

Victoria Seest (Undergraduate, Indiana University, Sustainability Scholar Funded Research Assistant)

2019-2021

Isabella Yallapragada (Undergraduate, Indiana University, Sustainability Scholar
Funded Research Assistant)

2019-2020

Charlotte McFerran (Undergraduate, Indiana University, Sustainability Scholar
Funded Research Assistant)

- Presented: McFerran, Charlotte & **Matthew Houser**. Why do people assume they are exempt from the impacts of climate change? Exploring the drivers of perceived personal risk in America's heartland. *Ecological Society of America*. August 2020.

2018-2019

Sophia Nelson (Undergraduate, Indiana University, Research Assistant)

Jaylin Jones (Undergraduate, Michigan State University, Research
Assistant)

2018

Jacob Mills (Undergraduate, Indiana University, Research Assistant)

Rosemary Robinson (Undergraduate, Indiana University, Research Assistant)

OUTREACH

2021

Team Member/Presenter, Educating for Environmental Change: The IU / WonderLab Summer Science Institute on Teaching Climate Change. *Presented on how Indiana residents view climate change to primary school teachers, June 15th

2020

Presenter, The Hoosier Life Survey. *Earth Charter Indiana Climate Leadership Summit 5*. August 27th, Virtual.

Presenter, The Hoosier Life Survey. *The National Weather Service: Indiana State Climate Service Team*, August 24th, Virtual.

Matthew Houser, Eric Sandweiss (Leads); Elizabeth Grennan-Browning, Kimberly Cook, Beth Gazley, Jonathan Hines, Joe Lange, Justin Peters, Heather Reynolds, James Shanahan (Collaborators). The Hoosier Life Survey Public Opinion Maps. *Environmental Resilience Institute*. *Interactive map where the public and key stakeholders can freely explore survey results at the state, regional and metro-level.

Team Member/Presenter, Educating for Environmental Change: The IU / WonderLab Summer Science Institute on Teaching Climate Change. *Presented on how Indiana residents view climate change to primary school teachers, June 16th and June 25th

Invited Presentation, Agriculture and the Social Sciences in Indiana.
**Presented to conservation outreach specialists on the state of farmers' climate change views*

2019

Invited Presentation, Indiana State Department of Agriculture Board of Directors.
**Presented on climate change, Indiana agriculture and farmers' views.*

Invited Presentation, The IU / WonderLab Summer Science Institute on Teaching Climate Change. **Presented on how Indiana residents view climate change to primary school teachers, July 10th*

MEDIA

Televised Interviews

2021

Climate change from a social scientist's perspective - how people' views have changed in recent years. WTHI-TV10, Terre-Haute, IN. Available at: <https://www.wthitv.com/content/news/Climate-change-from-a-social-scientists-perspective---how-people-views-have-changed-in-recent-years--573848811.html>

Washed Away: How extreme events are changing attitudes on climate. *abc57news, South Bend, IN*. Available at: <https://abc57.com/news/washed-away-how-extreme-events-are-changing-attitudes-on-climate>

Radio Interviews

2020

The Hoosier Life Study. *"All IN" National Public Radio (NPR) Podcast* (broadcast across all Indiana NPR stations). May 1. Available at: <https://www.npr.org/podcasts/747071269/all-i-n>

The Hoosier Life Study. *WFHB Local News*. April 27. Available at: <https://wfhb.org/news/wfhb-local-news-april-27-2020/>

2019

Study: Majority of Hoosiers believe climate change is real. *Public News Service*. Available at: <https://www.publicnewsservice.org/2019-09-06/climate-change-air-quality/study-majority-of-hoosiers-believe-climate-change-is-real/a67676-1>

- Picked up by 14 media outlets

2018

Expert Panelist, The impact of climate change on Indiana. *Noon Edition, WFIU Bloomington, Indiana Public Media*, October 24. Available at: <https://indianapublicmedia.org/noonedition/impact-climate-change-indiana/>

Newspaper Interviews

2021

Saenz, Enrique (July 6th, 2021). Half of all Hoosiers expect Decade of Disease, Extreme Weather and Economic Crisis. *Indiana Environmental Reporter*. Available at: <https://www.indianaenvironmentalreporter.org/posts/half-of-all-hoosiers-expect-decade-of-disease-extreme-weather-and-economic-crisis>

2020

Cusick, Daniel (October 7th, 2020). Pence called climate change a ‘myth.’ Does Ind. Agree? E&E News reporter. Available at: <https://www.eenews.net/climatewire/stories/1063715659>

Reschke, Michael. (Sept. 13th, 2020). IU reports show feelings on climate change in Indiana's metro areas. *The Herald Times*. Available at: https://www.hoosiertimes.com/herald_times_online/news/iu/iu-reports-show-feelings-on-climate-change-in-indianas-metro-areas/article_6f895200-f45b-11ea-95d0-5bc9d4bbcdac.html

Wilson, Mark (2020). Survey: Evansville residents among most skeptical in the state on climate change. *Evansville Courier & Press*. Available at: <https://www.courierpress.com/story/news/local/2020/09/05/survey-evansville-residents-among-most-skeptical-state-climate-change/5695420002/>

Gibson, London (2020). Hoosiers support climate policies — even if they don't believe in climate change. *Indy Star* (Front page story). Available at: <https://www.indystar.com/story/news/environment/2020/09/02/indiana-university-survey-shows-hoosier-support-climate-policies/5677764002/>

Saenz, Enrique (2020). Survey analysis finds race plays role in perception, vulnerabilities to climate change in Indiana. *Indiana Environmental Reporter*. Available at: <https://www.indianaenvironmentalreporter.org/posts/survey-analysis-finds-race-plays-role-in-perception-vulnerabilities-to-climate-change-in-indiana>

Saenz, Enrique (2020). Survey finds Hoosiers’ political divisions extend to environmental issues. *Indiana Environmental Reporter*. Available at: <https://www.indianaenvironmentalreporter.org/posts/indiana-university-survey-finds-hoosiers-political-divisions-extend-to-environmental-issues>

McLaughlin, Lauren (2020). Survey report suggests environmental policy is nonpartisan issue for most Hoosiers. *The Indiana Daily Student*. Available at: <https://www.idsnews.com/article/2020/06/survey-report-suggests-environmental-policy-is-nonpartisan-issue-for-most-hoosiers>

Saenz, Enrique (2020). Survey finds Hoosiers underestimated risk of major disease outbreak. *Indiana Environmental Reporter*. Available at: <https://www.indianaenvironmentalreporter.org/posts/survey-finds-hoosiers-underestimated-risk-of-major-disease-outbreak>

2019

Oates, Bryce (2019). Farmers' experience of climate change doesn't alter politics, study says. *The Daily Yonder*. Available at: <https://www.dailyyonder.com/farmers-experience-of-climate-change-doesnt-alter-politics-study-says/2019/11/14/>

Nash, Stephen (2019). Nash: Climate change, Lynchburg's heat and silence. *The News & Advance*. Available at: https://www.newsadvance.com/opinion/columnists/nash-climate-change-lynchburg-s-heat-and-silence/article_79e89cfe-a1c7-5b34-80f7-b2ae1561f739.html

Smalstig, Madi (2019). Resilience institute welcomes experts. *Indiana Daily Student*. Available at: https://issuu.com/idsnews/docs/binder1_bcaf79e93e2062

Coverage of Research (No interview)

2020

Bowman, Sarah & London Gibson (Oct. 5th, 2020). Environmental issues loom large in 2020 election. Here's what they could mean for Indiana. *Indy Star*. Available at: <https://www.indystar.com/story/news/environment/2020/10/05/election-2020-what-environmental-issues-could-mean-indiana/3536464001/>

Sawatsky-Kingsley, Aaron. (Sept. 4th, 2020). Residents asked to examine resilience index, opinion map. *Goshen News*. Available at: https://www.goshennews.com/news/aaron-sawatsky-kingsley-residents-asked-to-examine-resilience-index-opinion-map/article_f1259eca-eeee-11ea-9161-8319fd687412.html

Reschke, Michael (2020). IU survey: Most Hoosiers weren't worried about outbreak before COVID-19. *The Herald Times*. Available at: https://www.hoosiertimes.com/herald_times_online/news/covid19/iu-survey-most-hoosiers-werent-worried-about-outbreak-before-covid-19/article_2af99dd0-84c5-11ea-8a22-e7c56afe0424.html

Miley, Scott (2020). Survey: Before COVID-19, Hoosier underestimated pandemic and climate change. *Herald Bulletin*. Available at: https://www.heraldbulletin.com/news/coronavirus/survey-before-covid-19-hoosiers-underestimated-pandemic-and-climate-change/article_9c1e15f2-8639-11ea-9ffb-db463ea41d7f.html

2019

Beals, Rachel (2019). Mike Pence's home state is worried about climate change, and Joe Biden's natural-gas ties. *Market Watch*. Available at: <https://www.marketwatch.com/story/mike-pences-home-state-is-worried-about-climate-change-and-joe-bidens-natural-gas-ties-2019-09-05>

Hines, Jonathan (2019). Hoosier Life Survey to gauge values, environmental attitudes throughout the state. *Environmental Resilience Institute News*, August 6. Available at: <https://eri.iu.edu/news/hoosier-life-survey.html>

Meet the Research Fellows Helping IU Prepare for Environmental Change, *IU Vice President for Research*. April 19. Available at:

<https://www.youtube.com/watch?v=RNaTUKlGwpQ>

IU's Environmental Resilience Institute fellows are combating climate change, *News at Indiana University Bloomington, Science and Technology*, April 17.

2018

Bellamy, A. S. (2018). Profit and hegemony in agribusiness. *Nature Plants*, 4(11), 867. Available at: <https://www.nature.com/articles/s41477-018-0296-5>

Research that benefits Indiana, the nation and the world, and an important historical remembrance. *Indiana University President's Update*, November 14th. Available at: <https://president.iu.edu/news/monthly-update/2018/november.html>

Suarez, Cyndi (2018). How to craft a narrative for social change: A Climate Example. *Non-Profit Quarterly, Climate Change and Environment*. Available at:

<https://nonprofitquarterly.org/how-to-craft-a-narrative-for-social-change-a-climate-example/>

IU environmental fellows seek to improve farms' resiliency, use art to further habitat preservation. *News at Indiana University Bloomington, Science and Technology*, September 24. Available at: <https://news.iu.edu/stories/2018/09/iub/24-iu-names-environmental-resilience-institute-fellows.html#>

SELECTED ACADEMIC PRESENTATIONS (underline denotes undergraduate)

Invited

How are midwestern farmers experiencing climate change?

2019 *Keynote address*, Association of School of Public and Environmental Affairs Ph.D. Students Annual Conference, Indiana University, February

Nitrogen and climate change adaptation: Accelerating contradictions in industrial agriculture.

2018 Indiana University Sustainable Food Systems Science Group, Brown Bag Series, Bloomington, October

Conference

Seest, Victoria and **Matthew Houser**. Drought tolerant seed use in the Eastern Corn Belt: Using seed dealer interviews to understand the lack of adoption.

2021 Rural Sociological Society, Virtual, July

Burhans, Molly and **Matthew Houser**. The Rural-Urban Divide across Hoosier climate change attitudes.

2021 Indiana University Rural Conference, Virtual, May

Houser, Matthew and Diana Stuart. An accelerating treadmill and overlooked contradiction in industrial agriculture: Climate change and nitrogen fertilizer.
2019 Ecological Society of America Annual Meeting, Louisville, KY, August

Houser, Matthew. Is the adoption of nitrogen best management practices associated with less nitrogen fertilizer use?
2019 Rural Sociological Society Annual Meeting. Richmond, VA, August

Houser, Matthew. Beyond “climate change”: Insights toward farmers’ development of pro-climate attitudes.
2017 Michigan State University Sociology Department Speaker Series. East Lansing, December

Houser, Matthew, Diana Stuart, and Michael Carolan. Is seeing believing? Applying a realist framework to examine agriculture and climate change.
2017 Rural Sociological Society Annual Meeting. Columbus, July

2017 Michigan State University Sociology Department Environmental Graduate Student Showcase, East Lansing, April

Houser, Matthew. Who framed climate change? Identifying the how and why of Iowa corn farmers’ framing of climate change.
2016 American Sociological Association Annual Meeting. Seattle, August

2015 Environmental Science and Policy Program Research Symposium. East Lansing, October

Houser, Matthew. Agriculture, resilience, and greenhouse gas emissions: exploring the persistence of corn farmers’ inefficient nitrogen fertilizer use.
2016 International Association of Society and Natural Resources. Houghton, June

Houser, Matthew. Social attractors in agro-ecological systems: an enhanced perspective on the resilience of nitrogen fertilizer pollution.
2015 American Sociological Association Annual Meeting. Chicago, August

Houser, Matthew. Local food, universal values: assessing local food purchasing using Value Beliefs Norms Theory.
2014 The Rural Sociological Society Conference. New Orleans, August

SERVICE ACTIVITIES

Professional

Reviewer, Global Environmental Change
Society and Natural Resources
Land Use Policy

Agriculture & Environmental Letters
Agricultural Systems
Agriculture and Human Values
Environment and Behavior
Land Degradation and Development
Renewable Agriculture and Food Systems
Journal of Environmental Management
Journal of Soil and Water Conservation
Journal of Rural Studies
Environmental Sociology
International Journal of Sociology
PeerJ

2021-Present

Working Group Member, Pesticide Program Dialogue Committee (PPDC), Office of Pesticide Programs, Environmental Protection Agency (EPA).

2019

Invited Contributor/Reviewer, Local Foods Marketing Practices (LFMP) Survey, United States Department of Agriculture (USDA)

Invited Consultant, The Pasture Project, Wallace Center at Winrock International. **Advised on suitable watersheds to pursue agroecological transition project implementation across Indiana.*

Institutional

Indiana University

2020-2021

Steering Committee Member, Prepared for Environmental Change/Environmental Resilience

2020

Task force member, Prepared for Environmental Change/Environmental Resilience Institute Fellows Task Forces

2019

Committee member, Prepared for Environmental Change/Environmental Resilience Institute strategic planning session

Invited Presenter (on behalf of the Fellows), Indiana University Grand Challenge, initiative, Prepared for Environmental Change External Review Presentation: "The Fellows Program."

Peer-Elected Annual Review Evaluator, Indiana University Grand Challenge, initiative, Prepared for Environmental Change Fellows 2019 Annual Evaluation Review Committee

Technical Reviewer, Indiana University Grand Challenge initiative, Prepared for Environmental Change Project Proposals

2018-2019

Founding Member, Environmental Resilience Institute Speaker Series Committee
Speakers recruited during tenure:

1. G. Philip Robertson, University Distinguished Professor, Department of Plant, Soil and Microbial Sciences, Michigan State University
2. Ryan Gunderson, Assistant Professor, Department of Sociology and Gerontology, Miami University

Michigan State University

2018

Speaker, LAUNCH, Professional Development Series, Department of Sociology, Michigan State University

2016

Co-Creator/Co-Leader, The New Cohort Orientation Workshop, Department of Sociology, August 20-22

2015-2016

Member, Department of Sociology Graduate Education Committee

2013-2014

Member, Department of Sociology Advisory Committee

Community

2020-2021

Steering Committee Member, IU Union of Concerned Scientists.

2019

Consultant, Environment Michigan. **Advised on the current scientific knowledge of public opinion on renewable energy and how to shift public opinion.*

Volunteer, Indiana Sustain IU Week (invasive weed puller)

Volunteer, Indiana University Student Farm

Consultant, Citizens Climate Change Lobby, Bloomington, IN. **Advised on strategies to effectively engage rural, climate skeptics*

2018

Panelist, Science on Tap Gets Tough on Climate Change, Science on Tap Bloomington, November

METHODS TRAINING

ICPSR Summer Program in Quantitative Methods, University of Michigan Longitudinal Data Modeling, Including Categorical Outcomes

Department of Sociology, Michigan State University
Structural Equation Modeling with Latent Variables
Multi-Level Modeling
Categorical/Logistic Regression
Linear Regression

Software

Stata
NVivo
AMOS
SAS
SPSS
Microsoft office suite
R (Beginner)
ArcGIS (Beginner)
Tableau (Beginner)

PROFESSION MEMBERSHIPS AND ASSOCIATIONS

2019-Present

Ecological Society of America

2014-2019

American Sociological Association

2013-2019

Rural Sociological Society
Long-Term Ecological Research Network

REFERENCES

Sandra Marquart-Pyatt, PhD

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Sustainable Communities Graduate Program and School of Earth and Sustainability
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Thomas and Kathryn Miller Professor of History
Department of History
Indiana University
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