# **Matthew Houser**

Curriculum Vitae



Applied Social Scientist,WebsitesThe Nature ConservancyResearch GateAssistant Research Professor,Research GateUniversity of Maryland Center forGoogle ScholarEnvironmental ScienceGoogle Scholar214 S Washington Street, Easton,MD 21601 (TNC office)Horn Point Laboratory,5475 Lovers Ln, Cambridge, MD21613matthew.houser@tnc.org

EMPLOYEMENT

### 2023-Present

Assistant Research Professor, University of Maryland Center for Environmental Science, Horn Point Laboratory

# 2021-present

Applied Social Scientist, The Nature Conservancy Maryland/DC Chapter

#### 2021-2023-

Regenerative Agriculture Fellow, The Nature Conservancy Maryland/DC Chapter and University of Maryland Center for Environmental Science, Horn Point Laboratory

### 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

Matthew Houser matthew.houser@tnc.org

> 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

EDUCATIO	N				
2018 Ph.D.	8				
	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	I INTERESTS				
Political-Ecology		Environmental Justice	Agricultural Systems		
Public Opinion/Views		Climate Change	Social-Ecological Systems		
	RESEARCH PRO				
	U	t or a drought of resilience? He	-		

management strategies might limit resilience provided through ecological adaptation. Funded by *National Science Foundation Dynamics of Integrated Socio-Environmental Systems* (Award: BCS-2009125) Matthew Houser matthew.houser@tnc.org

Role: Co-PI

Advancing farmers' capacity to prepare for and address climate change: Using an integrated, social science approach to identifying technical support related barriers and opportunities. *Harry R Hughes Center for Agro-Ecology, State of Maryland* Role: PI

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* 

Role: Key Personnel

The Delmarva Wetland Partnership. *The National Fish and Wildlife Foundation* Role: Social Science Lead

Equity in Landscape Restoration: Understanding Underserved Landowner Experiences in Maryland. USDA, Natural Resource Conservation Service. Role: Social Science Lead

REFEREED PUBLICATIONS (\* denotes equal contributions; <u>underline</u> denotes student or technician contributor; + denotes postdoctoral contributor; ++ denotes non-academic contributor)

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*.

Houser, Matthew, <u>Rachel Irvine</u>, & Sandra Marquart-Pyatt. Market volatility is driving rapid changes in farmers' nitrogen management. *Conservation Letters*.

In review

**Houser, Matthew**, Brian Campbell<sup>++</sup>, Amy Jacobs<sup>++</sup>, Su Fanok<sup>++</sup>, Sue Ellen Johnson<sup>++</sup> (*Revise and Resubmit*). Farmers' participation in conservation programs: Identifying barriers and potential for innovative designs options. *Journal of Soil and Water Conservation* 

#### Published

2023

<u>Irvine, Rachel</u>, **Matthew Houser**, Sandra T. Marquart-Pyatt, <u>Lana Bolin</u>\*, Elizabeth Grennan Browning\*, Glade Dott\*<sup>+</sup>, Sarah E. Evans\*, Mia Howard\*<sup>+</sup>, Jennifer Lau\*, & Jay T. Lennon\* (2023). Soil health through farmers' eyes: Toward a better understanding of how farmers view and value soil health and manage for heathier soils. *Journal of Soil and Water Conservation*.

McCumber, Andrew<sup>+</sup>, Abigail Sullivan, **Matthew Houser**, Ranjan Muthukrishnan. (2023). Are lakes a public good or exclusive resource? Towards value-based management for aquatic invasive species. *Environmental Science and Policy*.

#### 2022

Houser, Matthew (2022). Farmer motivations for excess nitrogen use in the US Corn Belt. *Case Studies in the Environment* 6(1), 1688823. https://doi.org/10.1525/cse.2022.1688823

**Houser, Matthew** (2022). Does adopting a nitrogen best management practice lead to less nitrogen fertilizer use? *Agriculture and Human Values 39*, 79-94. <u>https://doi.org/10.1007/s10460-021-10227-9</u>

**Houser, Matthew**, Beth Gazley, Heather Reynolds, Elizabeth Grennan Browning, Eric Sandweiss, & James Shanahan (2022). Public support for local adaptation policy: The role of social-psychological factors, perceived climatic stimuli, and social structural characteristics. *Global Environmental Change* 72, 102424. https://doi.org/10.1016/j.gloenvcha.2021.102424

#### 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*. <u>https://doi.org/10.3389/fclim.2021.662847</u>

**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

### PEER REVIEWED BOOKS/EDITED VOLUMES

#### 2022

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.) (2022). 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.) (2022). 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.) (2022). Climate Change and Resilience: Lessons for Hoosiers and Beyond. *Indiana University Press* 

PUBLICATIONS FOR PUBLIC AUDIENCES (\* denotes equal contributions; <u>underline</u> denotes student or technician contributor; + denotes postdoctoral contributor; ++ denotes non-academic contributor)

2022

**Houser, Matthew**, Amy Jacobs<sup>++</sup>, Chase Colmorgen<sup>++</sup>, Mike Dryden<sup>++</sup>, Daniel Lawson<sup>++</sup>, Dave Martin, Michelle Canick<sup>++</sup>, Chase McLean<sup>++</sup>, Rich Mason<sup>++</sup> (September, 2022). Meeting the Bay's Wetland Goals: Insights from the Delmarva Wetland Partnership. *The Nature Conservancy*. Available at: https://www.conservationgateway.org/Documents/Delmarva-Wetland-Partnership-Report\_Final.pdf

<u>Burhans, Molly</u>, **Matthew Houser**, Eric Sandweiss\*, Beth Gazley\*, Elizabeth Grennan Browning\*, Heather Reynolds\*, & James Shanahan\* (June, 2022) How Do

Rural Hoosiers View Climate Change? Insights Toward Engagement and Policy Design. *Indiana University Environmental Resilience Institute.* https://eri.iu.edu/tools-and-resources/hoosier-life-survey/hls-rural-report.pdf

Featured, with associated interviews, in: The New York Times Climate Forum, Indiana Public Media, The Daily Yonder

### 2021

Houser, Matthew, Eric Sandweiss, Beth Gazley, Elizabeth Grennan Browning, Heather Reynolds, & James Shanahan (June 29<sup>th</sup>, 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-andresources/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 5<sup>th</sup>, 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-a815-13d9aeeecac0.html

Houser, Matthew & Michael Hamburger (April 1<sup>st</sup>, 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 30<sup>th</sup>, 2021). Ending Indiana wetlands safeguards hurts wildlife. Here's how it also hurts us. *Indy Star*. Available at: <u>https://www.indystar.com/story/opinion/2021/03/30/indiana-wetlands-safeguards-protect-wildlife-bill-389/4797644001/</u>

Houser, Matthew & Michael Hamburger (March, 24<sup>th</sup>, 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 3<sup>rd</sup>, 2020). Viewpoint: The survey says: South Bend is uncertain about climate change. *South Bend Tribute*. 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**<sup>\*</sup> & Eric Sandweiss<sup>\*</sup> (September 23<sup>rd</sup>, 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 27<sup>th</sup>, 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 21<sup>st</sup>, 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 14<sup>th</sup>, 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: <u>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</u>

 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 29<sup>th</sup>, 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 20<sup>th</sup>, 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/toolsand-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 20<sup>th</sup>, 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 5<sup>th</sup>, 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: <u>https://www.newsadvance.com/opinion/columnists/nash-climate-changelynchburg-s-heat-and-silence/article\_79e89cfe-a1c7-5b34-80f7b2ae1561f739.html</u>

# 2018

Sullivan, Abigail & **Matthew Houser** (November 30<sup>th</sup>, 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 22<sup>nd</sup>, 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: <u>https://nonprofitquarterly.org/how-to-craft-a-narrative-for-social-change-a-climate-example/</u>

# DATASETS

**Houser, Matthew**, Eric Sandweiss, Beth Gazley, Elizabeth Grennan Browning, Heather Reynolds, & James Shanahan. (2021). The Hoosier Life Survey Dataset. Indiana University, Bloomington, IN: Environmental Resilience Institute.

GRANTS, AWARDS, ENDOWMENTS AND FELLOWSHIPS (\* denotes equal contributions; <u>underline</u> denotes undergraduate student) **TOTAL AWARDED TO DATE (as PI, co-PI or Direct Recipient): \$2,526,329** 

# Grants

# External, in review

Zhang, X., Riddle-Wagner, C., **Houser, M.,** Davidson, E., Kanter, D., Davis, C., Liu, D., Wu, N., Harris, L., Elmore, A., Macdonald, G., The Global Nitrogen Innovation Center for Clean Energy and the Environment (NICCEE). The National Science Foundation Global Centers. (*\$5,000,000 requested*).

# External, Funded

2023

Houser, Matthew\*, Amy Jacobs\*, Mike Dunn\*, & Kris Johnson\*. Profitable Conservation Around the Margins: A Program to Restore Marginal Farmland to Deliver Greenhouse Gas and Habitat Benefits. *Corteva*. (\$992,661 requested; awarded—\$403,001 awarded)

# 2022

Novick, Kimberly, Jennifer Tank, Todd Royer, Landon Yoder, Shellye Shuttles & **Matthew Houser** (*Key Personnel*). 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; *funded in full*).

**Houser, Matthew**, Amy Jacobs, and Lindsay Thompson. Advancing farmers' capacity to prepare for and address climate change: Using an integrated, social science approach to identifying technical support related barriers and opportunities. *Harry R Hughes Center for Agro-Ecology, State of Maryland* (\$90,000 requested; full proposal requested; finalist presentation requested; *funded at* \$47,064.34).

Private donation received to support project (2022): \$48,000

# 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

2023

**Houser, Matthew**, Amy Jacobs, Su Fanok, Andrew Lacatell, Mike Dunn, Jessica D'Ambrosio, Paige Frautschy, Maria Lemke, Andrew Elmore. Targeted Lands, Tailored Engagement: A Socio-Ecological Systems Approach to Conservation Engagement. *Foundation for Food and Agricultural Research* (\$401,500 requested; *not funded*).

Fisher, Kristin, **Matthew Houser**, Amy Jacobs, Su Fanok. Accelerating Adoption of Precision Nutrient Management (4R) Practices with Trusted Advisors and Tiered

Incentives. USDA-NRCS Conservation Innovation Grants On Field Trials (\$2,200,000 requested; not funded).

Nardin, William, & **Matthew Houser**. The Socio-Agri-Geomorphological Evolution (SAGE) of the Farm-Marsh boundary in the face of sea level rise: Making models usable to encourage adaptive management. *Harry R Hughes Center for Agro-Ecology, State of Maryland (\$200,000 requested, not funded)*.

Fisher, Kristin, & **Matthew Houser**. Evaluating nitrogen use efficiency as an agronomic tool for encouraging increased fertilizer efficiency, generating measurable and site-specific environmental outcomes, and increasing resilience to climate change. *Harry R Hughes Center for Agro-Ecology, State of Maryland (\$100,000 requested, not funded)*.

### 2022

Yan, Xiao-Hai, Patricia Glibert, Di Jin, Cherese Winstead, Cathy Wu, Saleem Ali, Wei-Jun Cai, Tal Ezer, **Matthew Houser**, Gerhard Kuska, Dana Veron. Large-Scale CoPe: SHORES (Science of Hazards in Oceanic-Rural Environments and Societies) *National Science Foundation Coastlines and People* (\$20,000,000 requested; not funded).

The National Fish and Wildlife Foundation. Chesapeake and Climate-Smart Commodities Partnership. *United States Department of Agriculture Partnerships for Climate-Smart Commodities*. (Amy Jacobs and **Matthew Houser**, subaward leads for The Nature Conservancy MD/DC Agricultural Team; subaward request: \$10,000,000; not funded).

### 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; not funded).

Novick, Kimberly, Todd Royer, Jennifer Tank, Janet McCabe, Adam Scribner, Mallory Barnes, Landon Yoder, **Matthew Houser**, Carl Bernacchi, Danica Lombardozzi, 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 Reponses 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* (Preproposal 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

2022

Fales, Mary, **Matthew Houser**, Jessica D'Ambrosio, Benjamin Wickerham. Mapping Farmer Information Networks Across Two States. *The Nature Conservancy* (\$114,000 requested, *Funded in full*).

### 2021

<u>Burnhans, Molly</u> & **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; declined*).

**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; declined*). **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

2022

Science Writing and Communication, MEES, University of Maryland Center for Environmental Science, Horn Point Laboratory (graduate level course; 15 MS and PhD students in total; co-instructor)

# Matthew Houser matthew.houser@tnc.org

# 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 <u>Themester Course</u>

# 2018

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

# Guest Lectures/Seminars

# 2022

"How to achieve sustainability" in: *Environment & Society*, Marine Estuarine Environmental Science (MEES) Program, University of Maryland Center for Environmental Sciences, Horn Point Laboratory.

# 2021

*"Sustainability"* in: *Environment & Society*, Marine Estuarine Environmental Science (MEES) Program, University of Maryland Center for Environmental Sciences, Horn Point Laboratory. Co-taught with Xin Zhang (UMCES, Appalachian Lab)

# 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

# 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)

# Mentorship

2023-

Rachel King, Conservation Social Science Technician, The Nature Conservancy

2021-

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

# 2020-2022

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

# 2020-2021

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: <u>McFerran, Charlotte</u> & 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/ENGAGEMENT

# 2023

**Speaker**, The Nature Conservancy MD/DC Chapter, Connecting Food, Chesapeake Bay, and Climate, Board of Trustees Retreat, May 4<sup>th</sup>, Eastern Shore Conservation Center, Easton MD

# 2022

**Invited Speaker**, The Nature Conservancy MD/DC Chapter, Integrating Social Science Into Agricultural Conservation, October All Staff Meeting, October 4<sup>th</sup>, Adkins Arboretum, MD

**Invited Speaker**, The Nature Conservancy MD/DC Chapter, Integrating Social Science Into Agricultural Conservation, Board of Trustees Meeting, September 23<sup>rd</sup>, Dodon Vineyards, Annapolis, MD

**Co-Speaker** (w/ Victoria Coles), The North East Soil Conservation District Meeting, What's in Store for the Eastern Shore? August 23<sup>rd</sup>, Cambridge, MD

**Speaker**, Water For Agriculture, *The Chesapeake Foodscape – A Complex Balancing Act*, March 30<sup>th</sup>, Virtual

**Invited Speaker**, The Pennsylvania 4-R Alliance Workshop, *What's shaping farmers' nitrogen management*, February 23<sup>rd</sup>, Mt. Joy, PA.

# 2021

**Invited Panelist,** Prepared for Environmental Change: The social dimensions of climate change webinar. Indiana University, Office of the Vice President for Research. November 29<sup>th</sup>, Virtual.

**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 15<sup>th</sup>* 

### 2020

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

**Presenter,** The Hoosier Life Survey. *The National Weather Service: Indiana State Climate Service Team*, August 24<sup>th</sup>, 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 16<sup>th</sup> and June 25<sup>th</sup>* 

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 10*<sup>th</sup>

### 2018

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

#### MEDIA

*Televised Interviews* 2021

Digging Deeper: Climate Matters. WPTA 21, Fort Wayne Indiana. Available at: <a href="https://wpta21.com/2021/08/19/digging-deeper-climate-matters/#.YR8PFT\_0KrA.twitter">https://wpta21.com/2021/08/19/digging-deeper-climate-matters/#.YR8PFT\_0KrA.twitter</a>

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

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

### 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: <u>https://wfhb.org/news/wfhb-local-news-april-27-2020/</u>

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

2022

Biron, Carey. (December 12<sup>th</sup>, 2022). U.S. Carbon Farming Takes Root-but do the economics add-up? *Context, Thomas Reuters Foundation*. Available at: https://www.context.news/net-zero/us-carbon-farming-takes-root-but-do-the-economics-add-up

Melotte, Sarah (August 25<sup>th</sup>, 2022). Research: Rural Climate Change Opinions Are More Complicated Than You Might Think. *The Daily Yonder*. Available at: <u>https://dailyyonder.com/research-rural-climate-change-opinions-are-more-complicated-than-you-might-think/2022/08/25/?gclid=CjwKCAjwpqCZBhAbEiwAa7pXeXscVn5hTgfRFINRxJH</u> YyH0nDdoAQByHi9jJaLLZa7DIzEdSFyN77RoC0XsQAvD BwE

Andreoni, Manuela (July 19<sup>th</sup>, 2022). Here's a secret about your neighbors. *The New York Times: Climate Forward*. Available at: <u>https://tinyurl.com/v7ha6czr</u>

Thiele, Rebecca (July 19<sup>th</sup>, 2022). Study: Leaving rural Hoosiers out of climate conversations fuels skepticism, resentment. *Indiana Public Media*. Available at: https://www.wfyi.org/news/articles/study-leaving-rural-hoosiers-out-of-climate-conversations-fuels-skepticism-resentment

### 2021

Saenz, Enrique (*July 6<sup>th</sup>, 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-expectdecade-of-disease-extreme-weather-and-economic-crisis

### 2020

Cusick, Daniel (October 7<sup>th</sup>, 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. 13<sup>th</sup>, 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

Matthew Houser matthew.houser@tnc.org

> 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-evansvilleresidents-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: <u>https://www.indianaenvironmentalreporter.org/posts/survey-analysis-finds-race-plays-role-in-perception-vulnerabilities-to-climate-change-in-indiana</u>

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

McLaughlign, 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-environmentalpolicy-is-nonpartisan-issue-for-most-hoosiers

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

### 2019

Oates, Bryce (2019). Farmers' experience of climate change doesn't alter politics, study says. *The Daily Yonder*. Available at: <u>https://www.dailyyonder.com/farmers-</u>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: <u>https://www.newsadvance.com/opinion/columnists/nash-climate-change-lynchburg-s-</u> heat-and-silence/article 79e89cfe-a1c7-5b34-80f7-b2ae1561f739.html

Smalstig, Madi (2019). Resilience institute welcomes experts. *Indiana Daily Student*. Available at: <u>https://issuu.com/idsnews/docs/binder1\_bcaf79e93e2062</u>

Coverage of Research (No interview) 2020

Matthew Houser matthew.houser@tnc.org

Bowman, Sarah & London Gibson (Oct. 5<sup>th</sup>, 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. 4<sup>th</sup>, 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-eeea-11ea-9161-

8319fd687412.html

Reschke, Michael (2020). IU survey: Most Hoosiers weren't worried about outbreak before COVID-19. *The Herald Times*. Available at: <u>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</u>

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=RNaTUKIGwpQ

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

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)	
SELECTED ACADEMIC I RESENTATIONS.	(undernine denotes undergraduate)	

Invited

Chesapeake Bay Agriculture: Using Social Science to Advance Conservation Engagement

- 2023 Michigan State University Sustainable Agriculture and Food Systems Visiting Scholars Program, Michigan State University. April 21<sup>st</sup>.
- 2022 Distinguished Speaker Seminar Series, University of Maryland Center for Environmental Science, Chesapeake Bay Laboratory. November 16<sup>th</sup>.

Invited Seminar Speaker, University of Maryland Center for Environmental Science, Appalachian Laboratory. December 9<sup>th</sup>.

Does adopting a nitrogen best management practice reduce nitrogen fertilizer rates?2022The Nature Conservancy Food Systems Science Lab Meeting, May

Integrating social and biophysical sciences: Insights from farmer research 2022 Chesapeake Bay Scientific and Technical Advisor Committee Quarterly Meeting, April

Advancing Farmers' Capacity to Prepare for and Address Climate Change 2022 *Invited Board Member Presentation,* Harry R Hughes Center for Agro-Ecology, University of Maryland, January

What's driving our response to climate change?

2021 *Invited Seminar Speaker*, University of Maryland Center for Environmental Sciences, Horn Point Laboratory, October

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

**Houser, Matthew.** Farmers' Participation in Incentivized Conservation Programs: Identifying Barriers and Opportunities for Innovative Designs.

2022 American Society of Agronomy, Crop Science Society of America, Soil Science Society of America meeting, Baltimore, November

Houser, Matthew, Amy Jacobs, Lindsay Thompson. Advancing Farmers' Capacity to Prepare For and Address Climate Change.

2022 Adapting to a Changing Climate in Delmarva (NOAA), July

<u>Seest, Victoria</u> 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
- 2021 Ecological Society of America Annual Meeting

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

- 2021 Indiana University Rural Conference, Virtual, May
- 2021 Ecological Society of America Annual Meeting

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, Elementa: Science of the Anthropocene Agriculture, Ecosystems & Environment Agriculture and Environmental Letters 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

### 2022-2023

**Invited Expert Panel Reviewer,** Conservation Innovation Grants: Trialing Dietary Interventions to Mitigate Enteric Methane Emissions in Dairy Cattle.

2021-2022

**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.* 

### 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

### 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

# 2019-2020

Ecological Society of America

2014-2019 American Sociological Association

2013-2019

Rural Sociological Society Long-Term Ecological Research Network