CFAES

SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES

Spring 2022 Student Project and Research Presentations

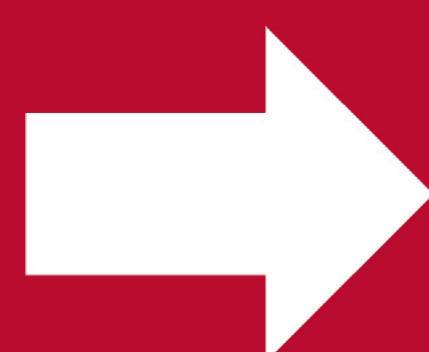## THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

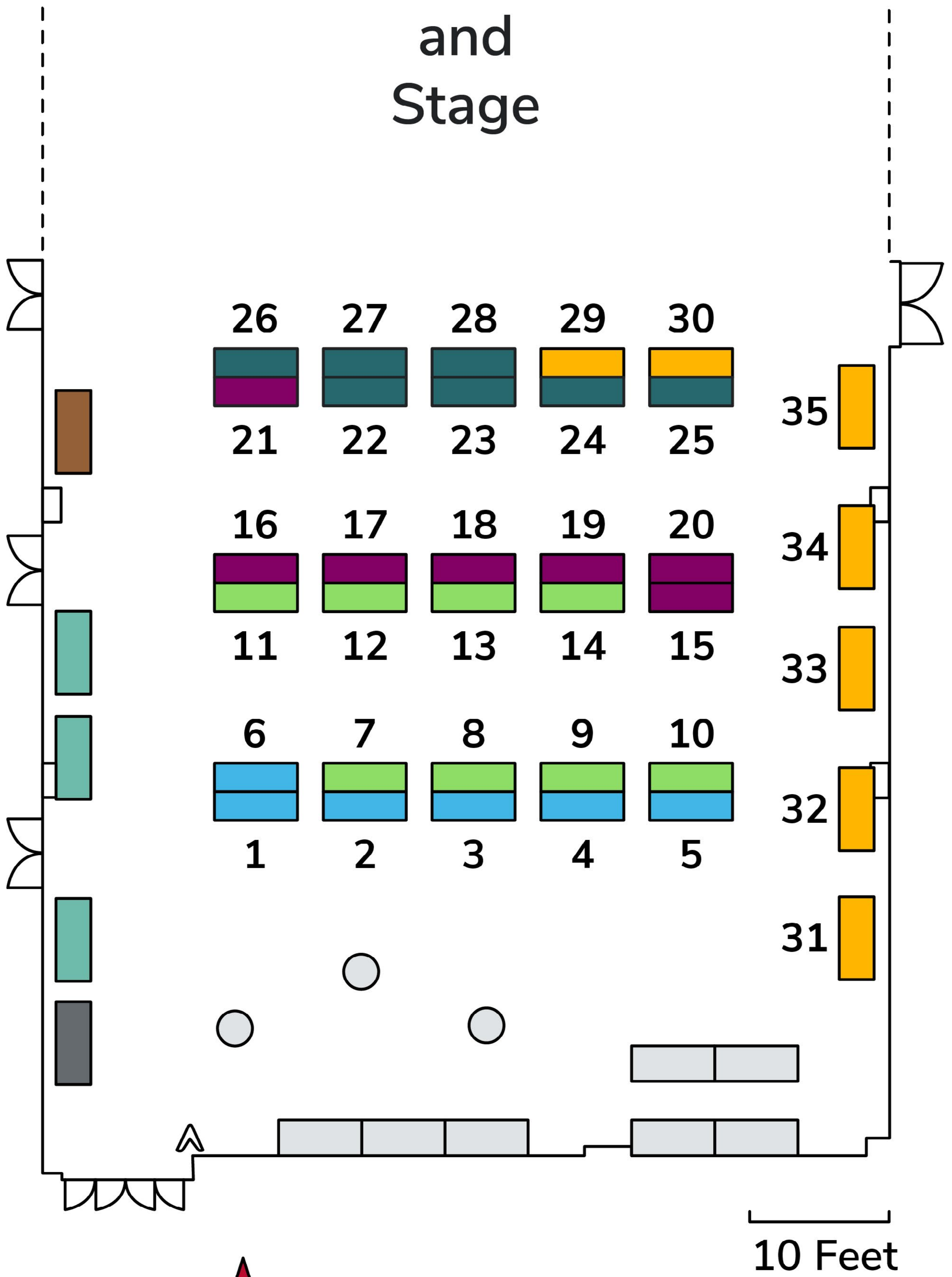senr.osu.edu

Performance Hall

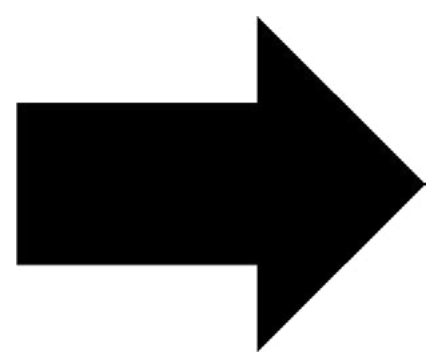## Additional Seating and Stage

26	27	28	29	30
21	22	23	24	25

35

16	17	18	19	20
11	12	13	14	15

34

33

6	7	8	9	10
1	2	3	4	5

32

31

10 Feet

★ Check in location

Honorary 100 table

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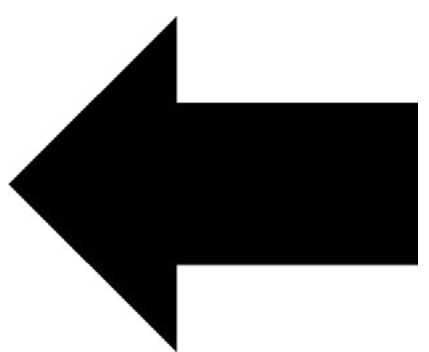
Instructor: Dr. Rebecca Swab

Client: Rebecca Swab, LLT Board Member, Licking County

1. Planting Trees and Pulling Weeds!
Presenters: Sean Jackson, James Kelling, Chedo Milkovich, Mara Rothacher, Zachary Spires

2. The Challenges of Raccoon Creek- Erosion, Historic Dumpsite, and Invasive Species
Presenters: Eleanor Chase, Logan Hatcher, Rolando Muniz, Kevin Streaker

Client: Lauren Richards, Natural Resources Specialist, Preservation Parks

3. Sandel Property: Restoration and Beyond
Presenters: Maren Benos, Jacob DeRodes, Griffin Gillespie, Dierdre Wetmore

4. Take a Gander at our Salamander... Habitat
Presenters: John Eshem, Cameron Gatto, Justin Gillilan, Alisa Mancini, Chelsea Mishan

5. Preservation Prairie: Restoration and Education Through Succession
Presenters: Hali Fliegelman, Isabel Nazarian, Georgie Phelps, Jenna Shroeder, Madeleine Spearing

Client: Tatiana Parfenova, RLA, CPSI- Landscape Architect/Project Manager, Columbus and Franklin County Metro Parks, Rapid 5 Project

6. RAPID Success for RAPID 5
Presenters: Haley Demmitt, Andrew Koenig, Erin Riebel, Macy Zalud
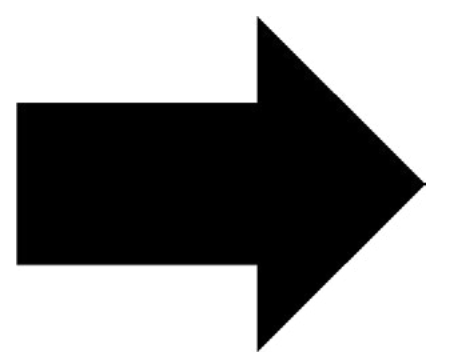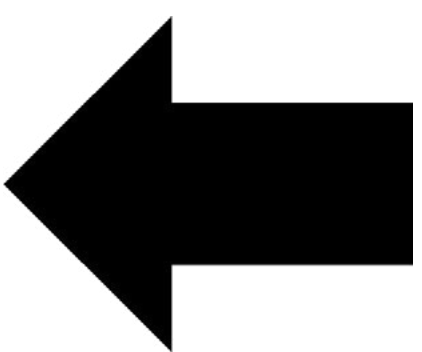
Instructor: Dr. Steve Lyon

Client: Rosalie Hendon- Environmental Planner, Columbus Recreation and Parks Department

7. **Columbus Recreation and Parks Department: South-side Tree Planting Initiative** City of Columbus Recreation and Parks Department (Option 1)
    Presenters: Serena Contreras, Jacklyn Debald, Alec Ogg, Emma Smith

8. **Recommendations for a Private Tree Ordinance in the City of Columbus to Increase Tree Canopy Cover** City of Columbus Recreation and Parks Department (Option 2)
    Presenters: Ben FitzGibbon, Olivia French, Dean Hjerpyn, Kate Ross

Client: Carrie Morrow, Assistant Resource Manager, Columbus and Franklin County Metro Parks

9. **Rocky Fork Metro Park Vernal Pools Evaluation** Columbus and Franklin County Metroparks (Option 1, Group 1)
    Presenters: Gage Airhart, Kaleigh Bryden, Andrew Graves, James Morris, Savannah Sellers

10. **Biotic Survey of an Enhanced Vernal Pool in Rocky Fork Metro Park** Columbus and Franklin County Metroparks (Option 1, Group 2)
    Presenters: Marlena Komatz, Faith Lamb, Sierra Lamb, Kat Zic

11. **Characterization of Schleppi Wetlands** Columbus and Franklin County Metroparks (Option 1, Group 3)
    Presenters: Teddy Cronin, Kayla Engle, Scott Hickman, Mariah Lashley

12. **Reforestation Success at Battelle Darby Creek Metro Park** Columbus and Franklin County Metroparks (Option 2, Group 1)
    Presenters: Emma Bloomberg, Lucy Campbell, Sami Howard, Hannah Hurdley, Angie Prahlow
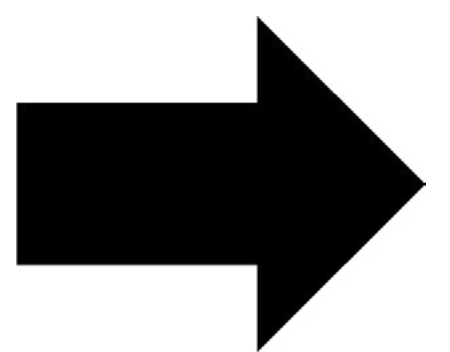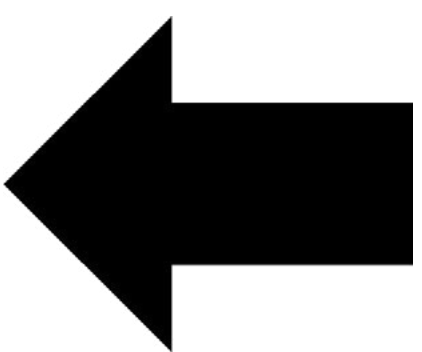
Client: Rebecca Swab, LLT Board Member, Licking County

13. **Natural Spaces Threatened by Urban Growth in Central Ohio** Licking Land Trust (Group 1)
    Presenters: Mary Casto, Allison Fisher, Abby Stitt, Caroline Treudler

14. **Prioritizing Green Spaces to Conserve in Licking County** Licking Land Trust (Group 2)
    Presenters: Bryce Hawkins, Erkia Lisco, Jo Moretina, Annie Wolodzko
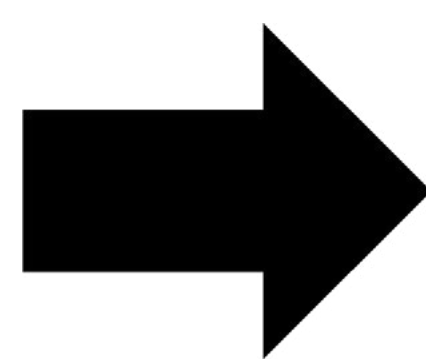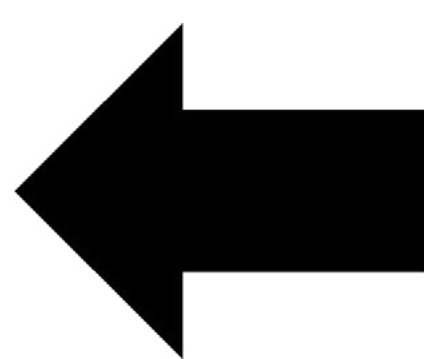
Instructor: Dr. Scott Demyan

Client: Michael Shelton, Associate Director, Sustainability Institute Office of Academic Affairs, OSU

15. **Aquatic Biodiversity Assessment**
    Presenters: Cole Hoffman, Katherine Oriyo, Mason Reid, Emerald Shen

16. **Asessing Terrestrial Biodiversity on Campus**
    Presenters: Miles Fulmer, Mary Ellen O'Toole, Hailey Taylor, Ellie Zinsmeister

Client: Austin Bussard, Marathon Petroleum, Right-of-way Specialist

17. **Integrated Vegetation Management of Pipeline Rights-of-Way in Southeast Ohio**
    Presenters: Thomas Becker, Tanner Lake, Gavin Nupp, Nathan Polack, Kourtney Van Wagner

18. **Landowner Engagement and Regulatory Examination of Right-of-Ways**
    Presenters: Emily Bockrath, Chloe Donovan, Christian Franczek, Joseph Santavicca

Client: Dr. Kent Halloran, Environmental Health and Safety at The Ohio State University, Safety Engineer-Water Compliance

19. **Natural Resource Management Plan for Semi-Natural Areas**
    Presenters: Amanda Bias, Kyra Hardy, Luke Holben, Ellen Kieser

*Client: Michael Shelton, Associate Director, Sustainability Institute Office of Academic Affairs, OSU*

20. **Nature-based Carbon Offsets on OSU Properties**
    Presenters: Mike Bell, Izzy Garrity, Ashlyn Hu, Ava Mastrianni

Client: Kathy Smith, OSU Extension

21. **Research for invasive Species Control**
    Presenters: Jacqueline Carlson, Brendan Herbert, Zane Robertson, Matthew Wiley, Ruitian Yu
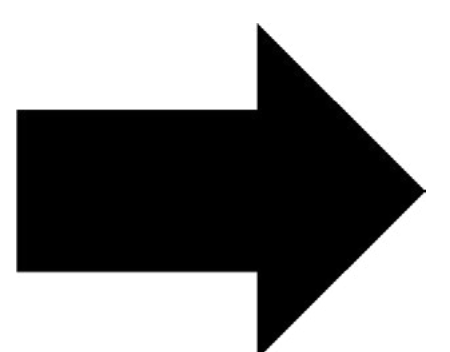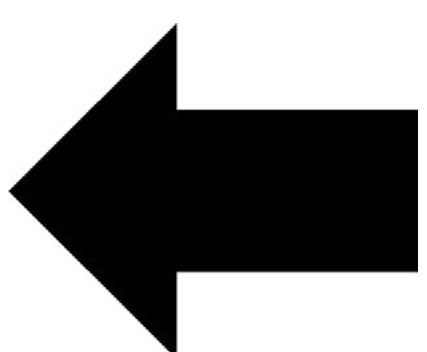
Instructor: Dr. Greg Hitzhusen

Client: Lauren Koch, Wexner Medical Center Sustainability Program Manager

22. **Scope 3 Sustainability Research Analysis of Recycled Blue Wrap Bedpans for the Wexner Medical Center**
    Presenters: Carley Ellis, David Leibas, Brian Paskey, Sara Szuba, Lizzie Van Deusen, Ruth Zheng

Client: Justin Milam, Senior Planner, City of Upper Arlington

23. **City of Upper Arlington Carbon Emissions Accounting**
    Presenters: Molly Ridge, Keaton Headley, Alex Tadda, Eleanor Jersild, Chandler Frenken, Kaiya Weston

Client: Cassidy Jenney, Energy Conservation and Sustainability Administrator, Ohio Department of Rehabilitation and Correction

24. **Ohio Department of Rehabilitation and Correction Solar Field Installation Potential and Reducing Recidivism**
    Presenters: Katy Buddelmeyer, Spencer Litzenberger, Jake Rice, Paige Lampman, Dean August, Andrew Schrantz

Client: Robert Nauman, Program Administrator, and Cassidy Jenney, Energy Conservation and Sustainability Administrator, Ohio Department of Rehabilitation and Correction

25. **Ohio Department of Rehabilitation and Correction Mowed Field Ecological Restoration Project**
    Presenters: Elliot Marrocco, Robert Riley, Natalie McFadden, Diana Menser, Jessica Tomastik

Client: Cassidy Jenney, Energy Conservation and Sustainability Administrator, Ohio Department of Rehabilitation and Correction

26. **Ohio Department of Rehabilitation and Correction Green Building Standards for ODRC**
    Presenters: Iris Borgert, Abigail Ruehle, Jack Sorce, Bang Lui, Grace Shisler, Nick Mollica
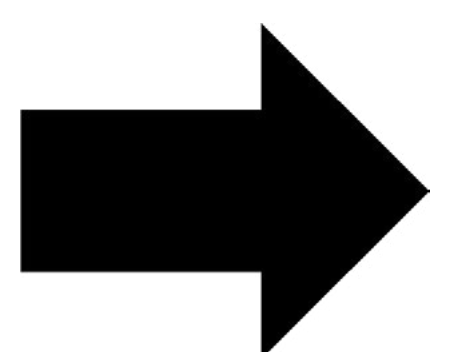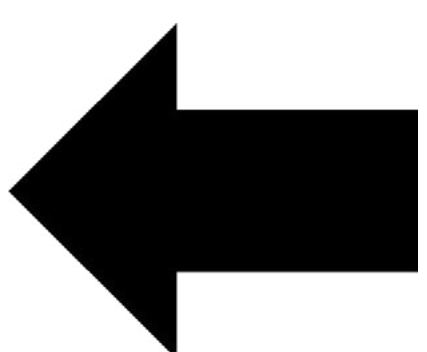
Client: Shelly Douglas, Earth Day Director, Green Columbus and The City of Columbus

27. **Developing Urban Tree Best Management Practices for the City of Columbus**
    Presenters: Ava Martz, Caitlin Perkins, Keith Burke, Xavier Green, Christian Monsivais

Client: Dr. Greg Hitzhusen , OSU Sustainability Institute Intentional Community Exploratory Research

28. **Creating an Ohio State Sustainable Education Community for Intentional Living (SECIL)**
    Presenters: Jenna Dent, Jordan Inskeep, Conner Johnson, Emma Lynne Johnson, Kennedy Rabquer
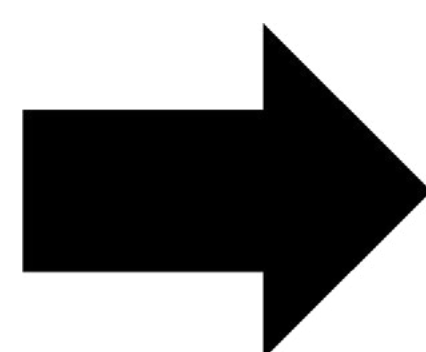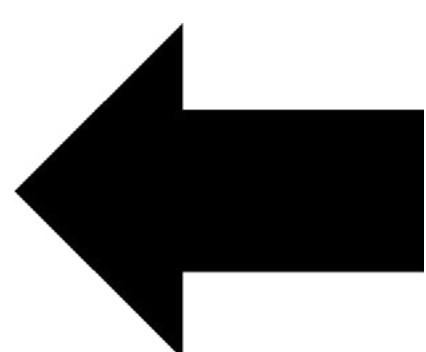
NRT Projects

Client: National Science Foundation

29. **Predictors of Electric Vehicle Adoption Intentions in Rideshare Drivers Relative to the General Public**
Presenter: Jamie Allen

Client: National Science Foundation

30. **Recognizing and Overcoming the Social Barriers to Nuclear Energy**
Presenter: Brian Capobianco

Client: Sloan Foundation, National Science Foundation

31. **An Analytical Optimal Control Method for the "Optimal Heat Mining" Problem**
Presenter: Qingrun Yang

Client: None

32. **Vulnerability assessment of US counties in the energy transitions using machine learning**
Presenter: Diego Hincapie-Ossa

Client: National Science Foundation

33. **Predicting airborne pollutant concentrations and events using low-cost pollutant sensors and machine learning: A case study**
Presenter: Ahmad Mohammadshirazi

Client: Honda R+D Americas, National Science Foundation

34. **3D Structured Porous Cathode Materials for Fast-Charging Electric Vehicles**
Presenter: Michael Lee

Client: First Solar, Terabase Energy, Bloom Energy, National Science Foundation

35. **Evaluation of Green Hydrogen Systems from Utility Solar**
Presenter: Kate Clelland
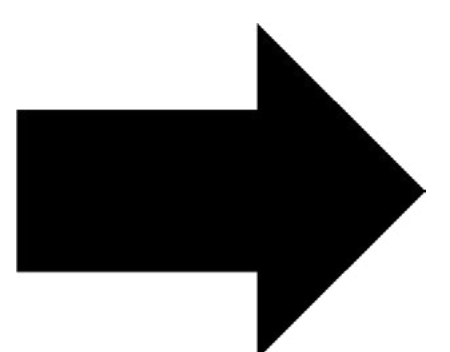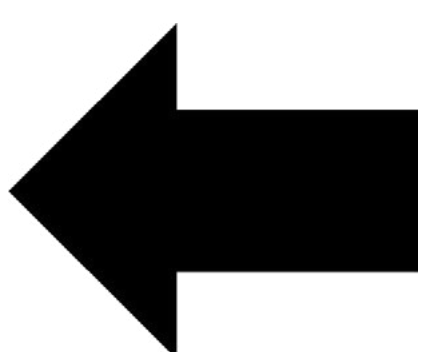
Kristy Watters, OSU Extension,
Adams County

 Atley W., Adams County 4-H
 Brody W., Adams County 4-H
 Kase W., Adams County 4-H

Jo Williams, OSU Extension, Scioto County

 Emily S., Scioto County 4-H

Erin Dailey, OSU Extension, Jackson County

 Addyson D., Jackson County 4-H
 Brady D., Jackson County 4-H

The Roles of Affective Forecasting, Environmental Identity, and Behavioral Familiarity in Decisions Related to Pro-Environmental Behaviors
 Presenter: Logan Hobbs