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Community Oriented Digital Engagement Scholars

# NGRREC Team

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**The National Great Rivers  
Research & Education Center**

# NGRREC Spring Symposium

# What is NGRREC and what they do?

- ❑ NGRREC: National Great Rivers Research & Education Center
- ❑ Mission:
  - ❑ Study the ecology of the big rivers
  - ❑ Study functions of watersheds that feed rivers
  - ❑ Study connections communities have with rivers

# Future Topics

- ❑ Summer Initiatives
  - ❑ Wetlands Initiative
  - ❑ Plastics Cycle Initiative
  - ❑ Education and Outreach



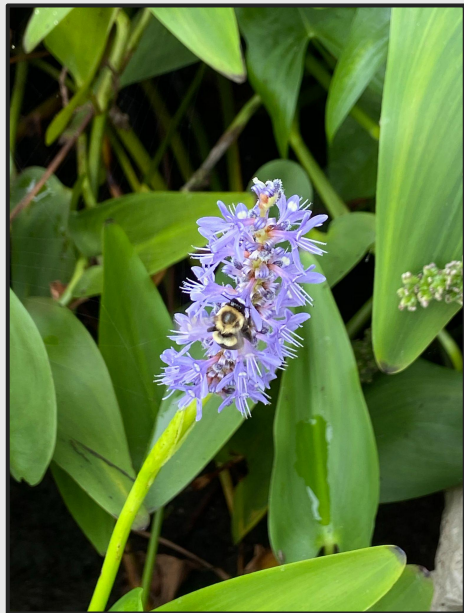
# Wetland Initiative at NGRREC

- What is a wetland?
  - Definition
  - Important to local ecology
- Southern Illinois a hotspot for wetlands in the Mississippi River Basin



Southern Illinois  
Wetlands

# Why are wetlands important ecosystems?



Ecological  
hotbed: Plants  
and Wildlife

# What research is NGRREC doing as part of the Wetlands Initiative?



Interns at NGRREC

# Why is it needed?





A close-up photograph of a clear petri dish filled with bright red, flake-like particles, likely microplastics. A small, clear glass vial is partially submerged in the particles. In the background, another petri dish with similar red particles is visible. The entire setup is on a metallic surface.

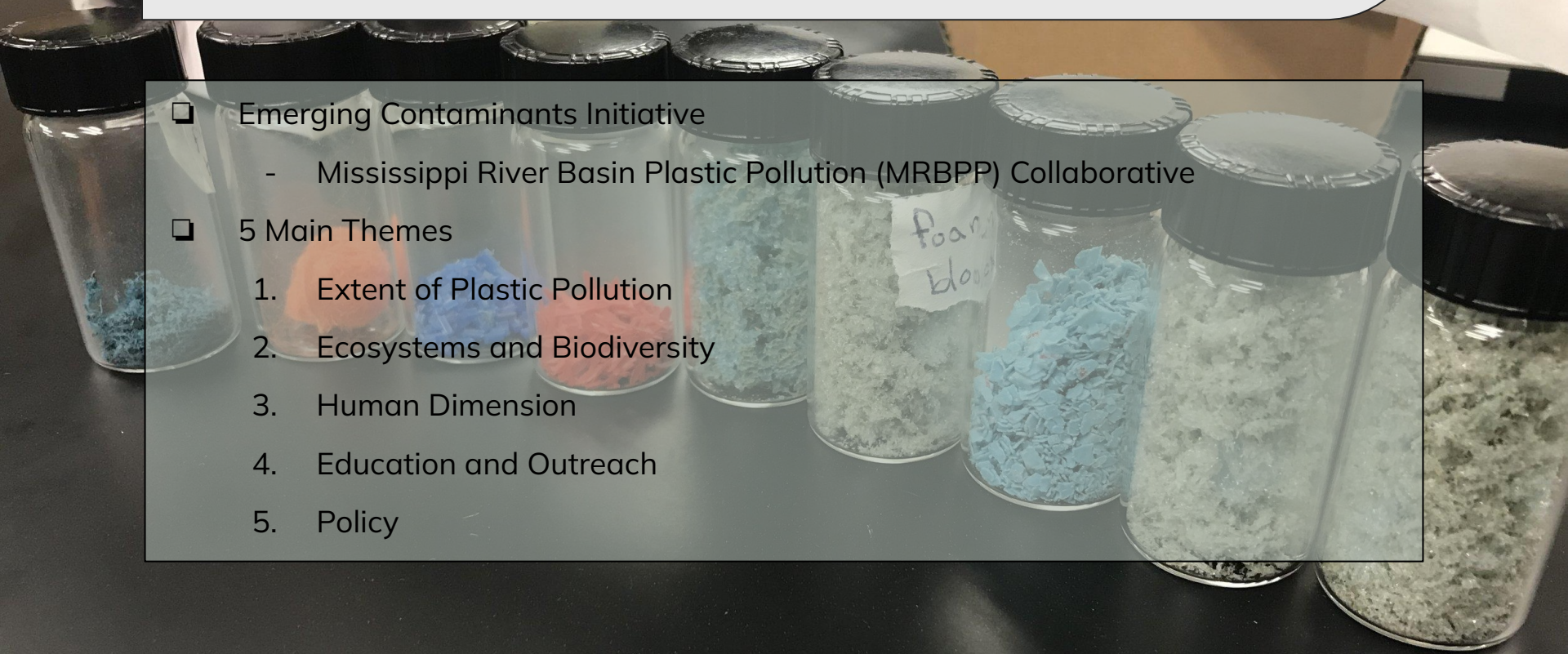
**What are Microplastics?**

# What is the importance of microplastic research?

- ❑ Microplastic research is lacking, as the issue has only come to public awareness in recent years
- ❑ Effects of microplastics on the human body are unknown
- ❑ Whether microplastics are affecting the ecosystem is also unknown
- ❑ By researching these plastics we are able to bring the results to policy makers for real change

# What is the Microplastics Initiative at NGRREC?

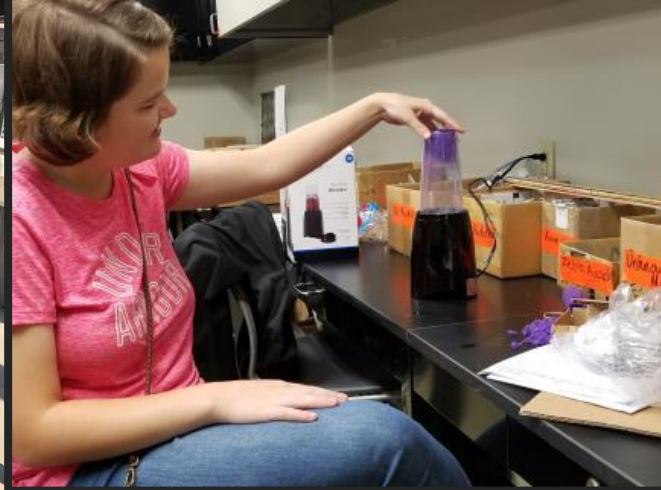
- ❑ Emerging Contaminants Initiative
  - Mississippi River Basin Plastic Pollution (MRBPP) Collaborative
- ❑ 5 Main Themes
  1. Extent of Plastic Pollution
  2. Ecosystems and Biodiversity
  3. Human Dimension
  4. Education and Outreach
  5. Policy





What research is NGRREC doing to understand microplastics?







## Education Program

- What does the education program look like at NGRREC?
- What is the educational mission?
- What are some programs that the education initiative has to offer?

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# Outreach

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- What is Outreach at NGRREC?
- What is Riverwatch?



# Photos from our Education/Outreach Lesson

ILLINOIS  
RIVER WATCH  
NETWORK  
NATIONAL GREAT RIVERS RESEARCH AND EDUCATION CENTER







Photo: Dr. Paige Mettler-Cherry

# Looking Forward

## Summer Goals

- **Understanding NGRREC**
  - What does that mean?
- **Broad range of experiences**
  - Participate in field research
  - Shadow summer camps, teacher workshops
  - Observe summer science convenings
  - Develop a digital library of summer activities and experiences



# Looking Forward

## Next Steps

- **Identify and develop digital projects**
  - Community Science apps
  - Websites
  - Self guided tour for the roof native garden
- **Outreach with high schools**
  - Community service programs
  - Introduce to career opportunities in natural resources
  - Volunteer opportunities for students

# Thank You!



With Love from the  
NGRREC Team

