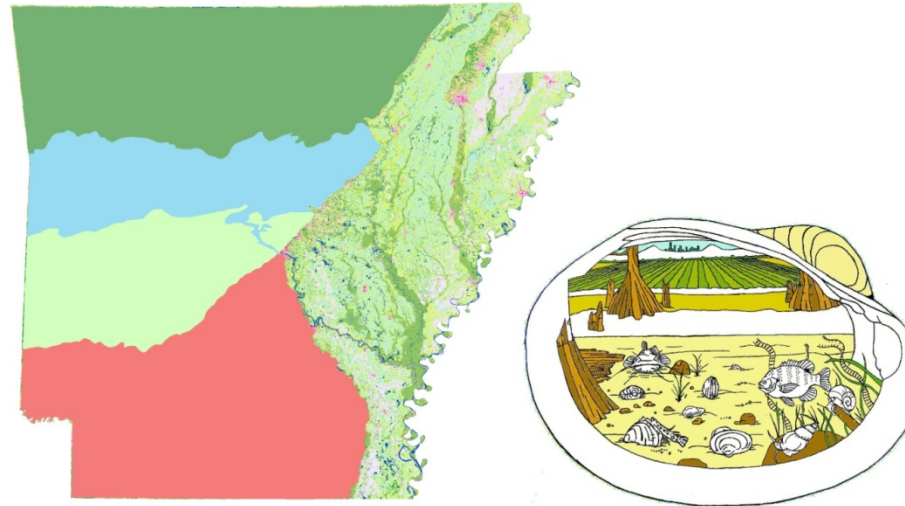


AR Curriculum Conference

ASU GK12 Program

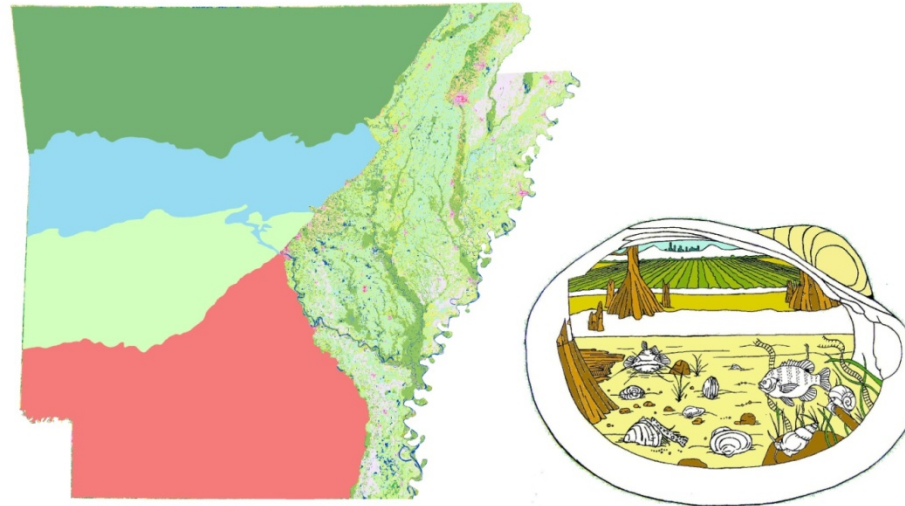


Land Use, Land Cover, and Biodiversity in the Mississippi Embayment

Dr. Cynthia Miller, Director
Delta Institute for Math & Sci/ Educ.
GK12 School District Coordinator

Welcome and Introductions

ASU GK12 Program



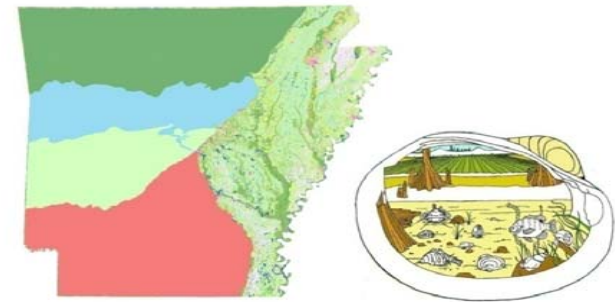
Land Use, Land Cover, and Biodiversity in the Mississippi Embayment

PI: Dr. Jennifer Bouldin; Co-PI's:
Drs. Anne Grippo, Tillman Kennon, and
Cynthia Miller

GK12 Fellows Introductions (Resident Scientists)

- Scott Chiavacci: Harrisburg
- Kevin Keen: Cross County
- Katie Lisko: Wynne
- Annabelle McKie: Cross County
- Bryan Reiley: Nettleton
- Mauricio Solis: Forrest City
- Seth Schimer: Wynne
- Sarah Thompson: Armorel

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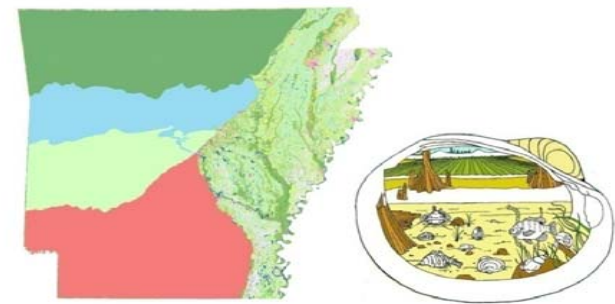


Land Use, Land Cover, and Biodiversity in the Mississippi Embayment

GK12 Mentor Teacher Introductions

- Armored: Alayna Duren, Kelly Hopper
- Cross County: Heidi Brewington, Jacob Maxwell, Jennifer McFarland, Melissa Moore
- Forrest City: Lisa Love, Charity McKeen
- Harrisburg: Denise Doyle, Teresa Sanders
- Nettleton: Heather Page, Matthew Novak
- Wynne: Cindy Barrett, Marc Griffin, Meredith Schweighart, Gabreia Smith

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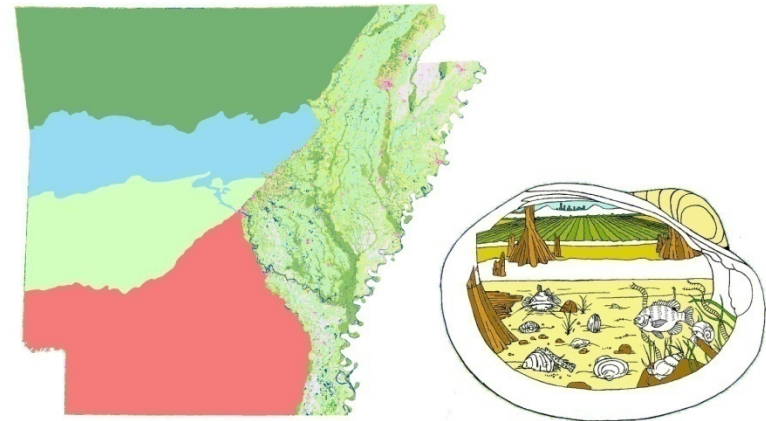


Land Use, Land Cover, and Biodiversity in the Mississippi Embayment

Grant Statistics

- **National Science Foundation GK12 Program**
- **5 year grant (renewed each year based on objectives met)**
- **\$2.3m total**
- **Yr. 2 funding approved**

ASU GK12 Program

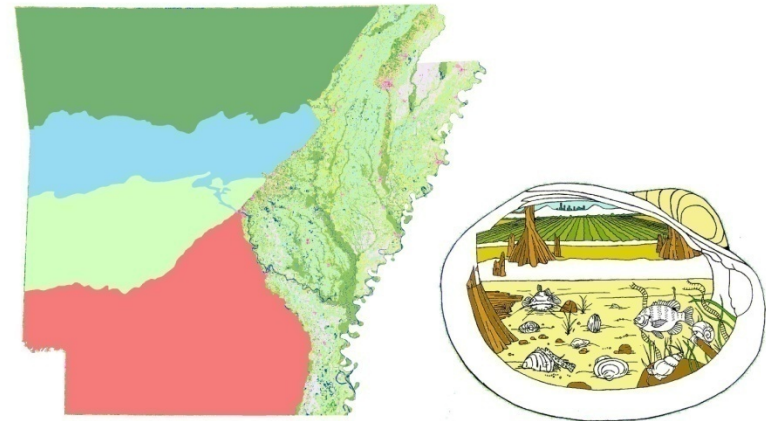


Land Use, Land Cover, and Biodiversity in the Mississippi Embayment

Theme

“Land Use, Land Cover, and Biodiversity in the Mississippi Embayment”:
land converted from forested wetland ecosystems into highly productive row crop agriculture causing a highly fragmented and modified ecosystem.

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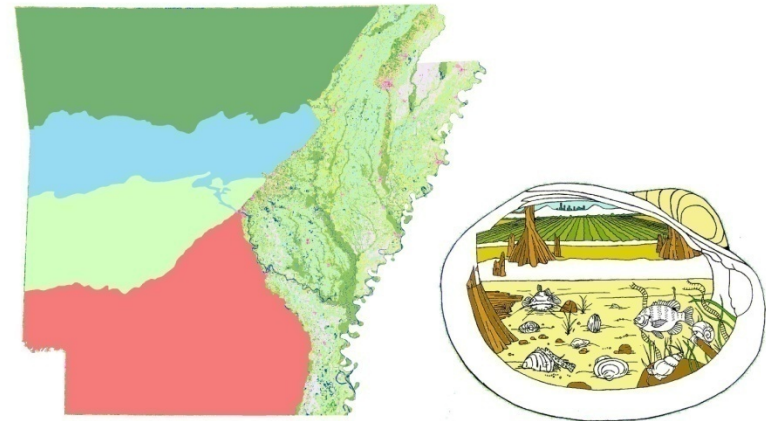


Land Use, Land Cover, and Biodiversity in the Mississippi Embayment

Land Use, Land Cover, and Biodiversity in the Mississippi Embayment

ASU Biodiversity research on atmospheric, soil, and water resources and how it affects ecosystems and organisms in our region.

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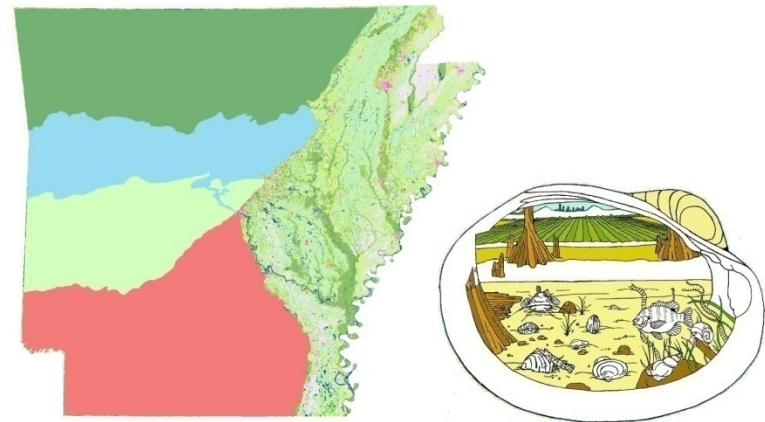


Land Use, Land Cover, and Biodiversity in the Mississippi Embayment

Land Use, Land Cover, and Biodiversity in the Mississippi Embayment

- Yr. 1 program placed 8 Fellows with 15 Mentor Teachers in 5 districts to teach 4th – 12th grade students lessons based on the Fellow's research and state/national standards.
 - Armorel
 - Cross County
 - Helena-West Helena
 - Nettleton
 - South Mississippi County

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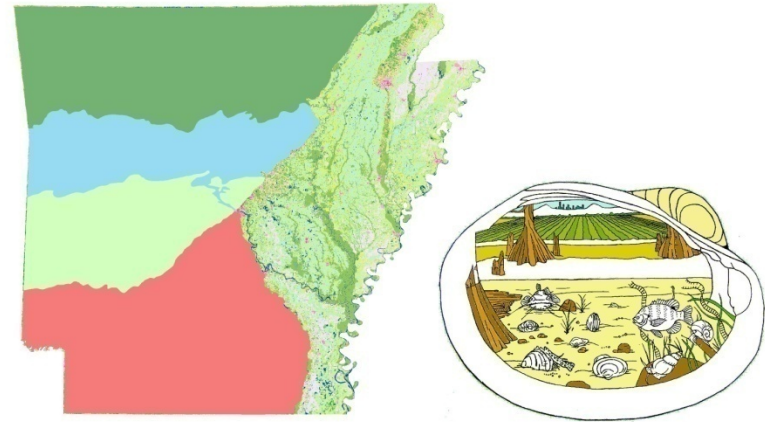


Land Use, Land Cover, and Biodiversity in the Mississippi Embayment

Land Use, Land Cover, and Biodiversity in the Mississippi Embayment

- Yr. 2 places 8 Fellows with 16 Mentor Teachers in 6 districts to teach 6th – 10th grade students lessons based on the Fellow's research and state and national standards.
 - Armorel
 - Cross County
 - Harrisburg
 - Forrest City
 - Nettleton
 - Wynne

ASU GK12 Program



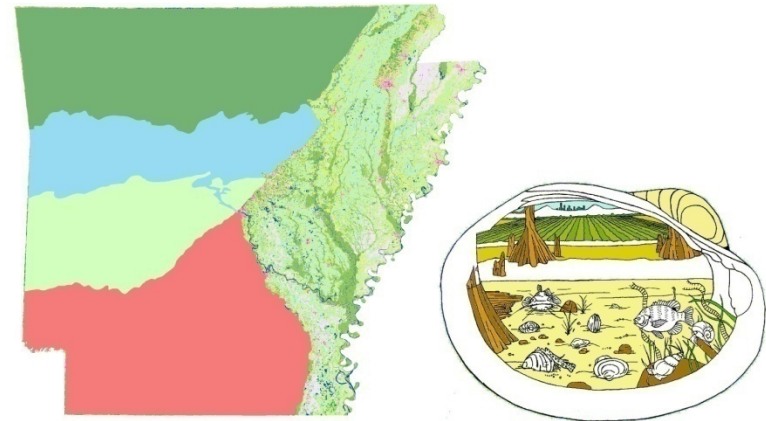
Land Use, Land Cover, and Biodiversity in the Mississippi Embayment

Land Use, Land Cover, and Biodiversity in the Mississippi Embayment

The goals of the program are:

- 1) to improve Fellows' skills in communicating science to a broad audience while gaining a deeper understanding of their own research;
- 2) to improve or enhance teachers' knowledge and experience;
- 3) to peak students' interest in STEM and STEM careers while exposing students to an enriched STEM environment; and
- 4) to strengthen partnerships between ASU and school districts.

ASU GK12 Program



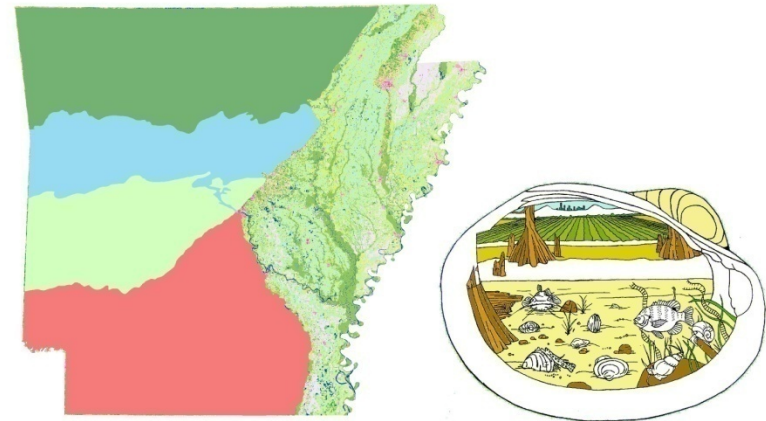
Land Use, Land Cover, and Biodiversity in the Mississippi Embayment

Land Use, Land Cover, and Biodiversity in the Mississippi Embayment

Fellows' responsibilities:

- **Develop 6E Lesson plans based on their research that fit the curriculum and meet AR Curriculum frameworks**
- **Work with 2 mentor science teachers at a school district**
- **Team teach 1 or 2 days/week**

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Land Use, Land Cover, and Biodiversity in the Mississippi Embayment

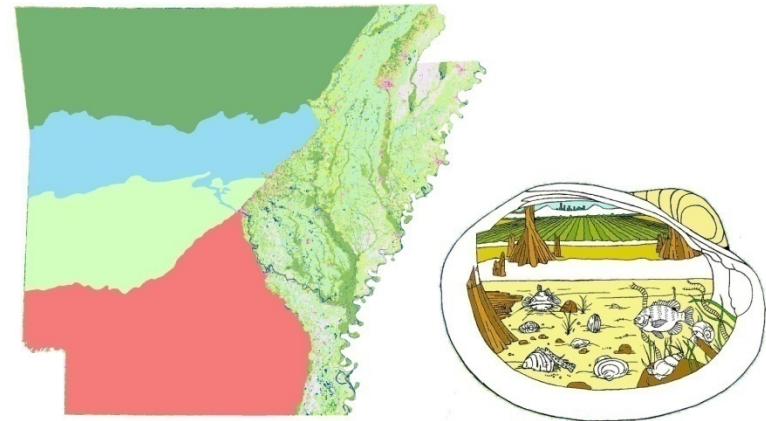
Land Use, Land Cover, and Biodiversity in the Mississippi Embayment

Mentor Teachers' responsibilities:

Mentor Fellow regarding:

- Pedagogical techniques
- Content and Context
- Delivery
- Inspiring STEM careers

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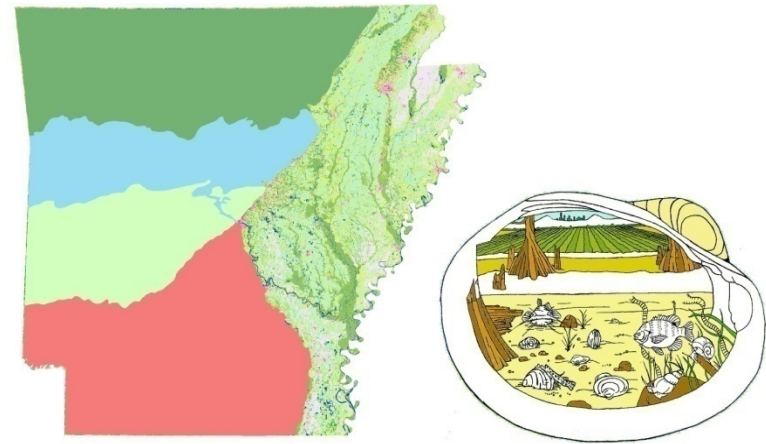


Land Use, Land Cover, and Biodiversity in the Mississippi Embayment

Local Advisory Committee Members

- Mentor Teachers
- Fellow
- Administrator
- Parent
- Community/Business Member

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Land Use, Land Cover, and Biodiversity in the Mississippi Embayment

Local Advisory Committee Responsibilities

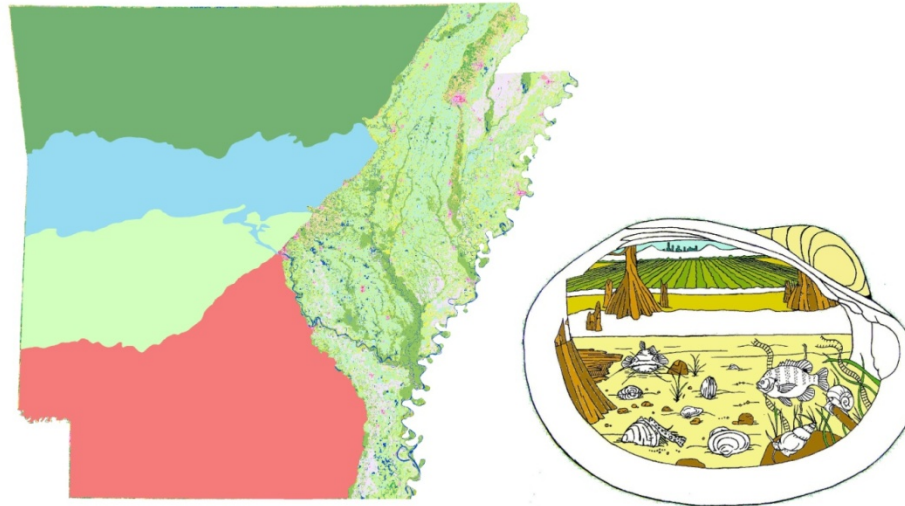
- Give feedback to School District Coordinator
- Meet at least once before Mid Year Meeting
- Meet at least once before Year End Meeting
- Other Meetings as needed
- Communicate any problems/issues promptly

GK12 Dissemination

- Include this project in ACSIP, Annual Reports, Resume/Vitae, National Board Certification, Presidential Award application, etc.
- Include GK12 news in school newsletters, website, emails, and news media (print & video). See sample press release.
- Submit Fellows' Lesson Plans to AR Science & Technology Authority SMART Webportal

Thanks for coming !

ASU GK12 Program



Land Use, Land Cover, and Biodiversity in the Mississippi Embayment

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camiller@astate.edu