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# MAKING CONNECTIONS: SPECIES AND TRANSPORTATION

EMILY DUKE  
ALDOT  
SR. BIOLOGIST

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# ALABAMA'S THREATENED AND ENDANGERED SPECIES



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# ENDANGERED: BLACK WARRIOR WATERDOG

- Currently found in the Black Warrior River Basin
  - Ideal habitat contains clay or bedrock substrate with little sand; abundant rock crevices and rock slabs; presence of dense leaf litter “islands”
  - Types of project activities to consider:
    - Bridge Replacements/Removals/Modifications
    - Culvert Extensions/Replacements/Removals
  - Transportation Concern → Heavy siltation could reduce cover, food, and smother nests/eggs; incidental take/harm of individuals
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MULBERRY FORK OF THE BLACK WARRIOR RIVER

US-31 in Cullman County



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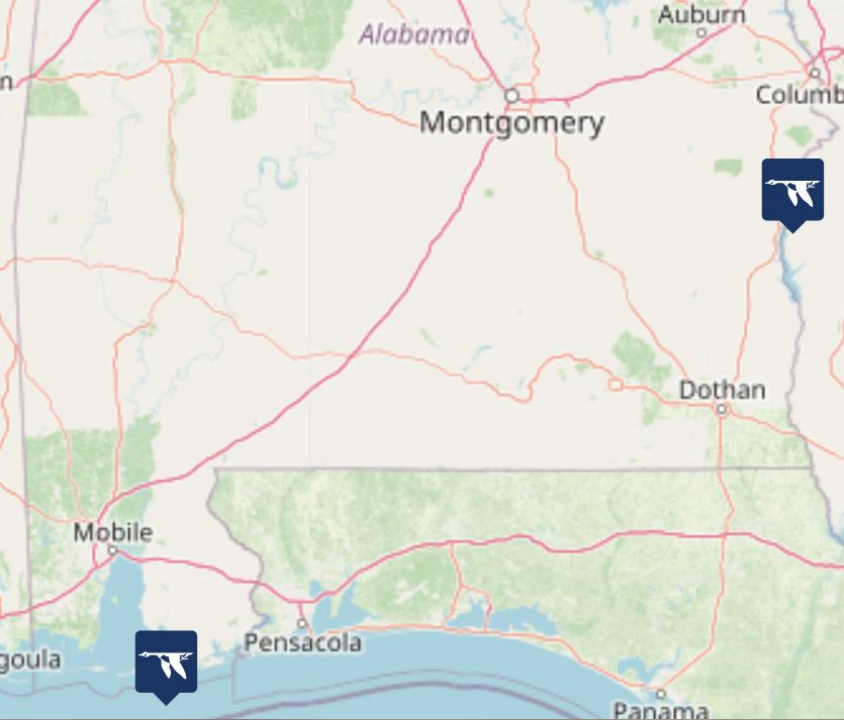
# THREATENED: FLATTENED MUSK TURTLE

- Currently found in the Black Warrior River Basin
  - Ideal habitat includes free-flowing creeks or small rivers with pools around 1 meter deep or more, abundant rock crevices and rock slabs, presence of mollusks; prefers bedrock substrates with extensive sand deposits
  - Nests along the creek/riverbanks
  - Types of project activities to consider:
    - Bridge Replacements/Removals/Modifications
    - Culvert Extensions/Replacements/Removals
  - Transportation Concern → Heavy siltation could reduce cover, food, and smother nests/eggs; incidental take/harm of individuals
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**Turkey Creek**

**Jefferson County**



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# THREATENED: PIPING PLOVER

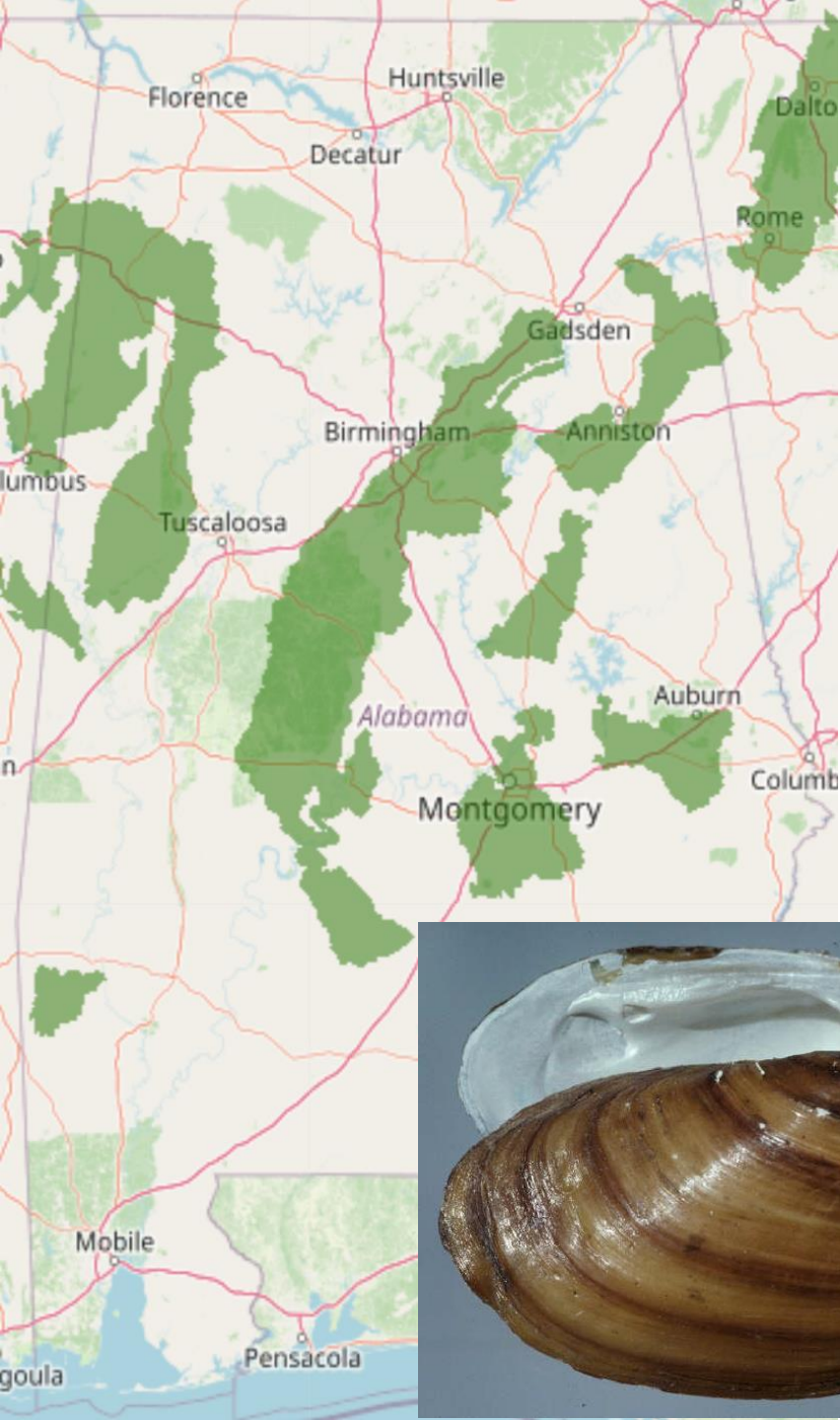
- Two migratory locations in Alabama: Eufaula National Wildlife Refuge (Eufaula, AL) and Bon Secour National Wildlife Refuge (Gulf Shores, AL)
  - All three breeding populations in the country winter along the Gulf Coast
  - Nests may be built on the upper portions of sandy beaches where grass tufts are present; may also be built on expansive sandflats and sandy mudflats
  - Types of project activities to consider:
    - Bridge Replacements/Removals/Modifications
  - Transportation Concern → Heavy siltation could reduce cover, food, and smother nests/eggs
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**Dauphin Island Bridge**

**Mobile County**





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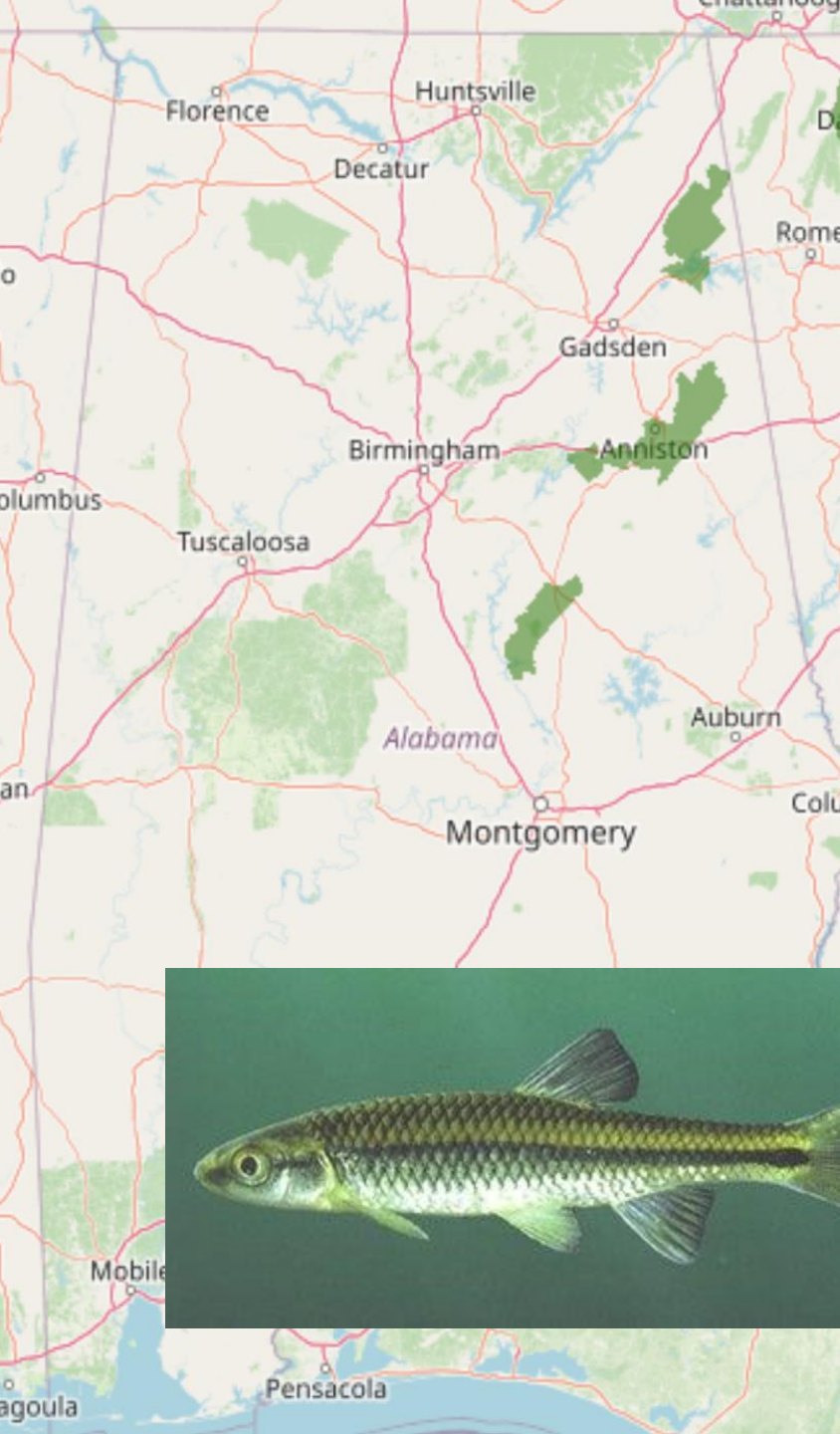
# ENDANGERED: SOUTHERN CLUBSHELL

- Currently found in 24 rivers, creeks, and associated tributaries
  - \*19 areas designated as critical habitat
- Burrows in gravel and sand at the bottom of large creeks and rivers where it filters food from the water column
- Types of project activities to consider:
  - Bridge Replacements/Removals/Modifications
  - Culvert Extensions/Replacements/Removals
- Transportation Concern → Heavy siltation could smother individuals and result in death; incidental take/harm of individuals





**SR-14 Over Sipsy River Greene/Pickens Counties**



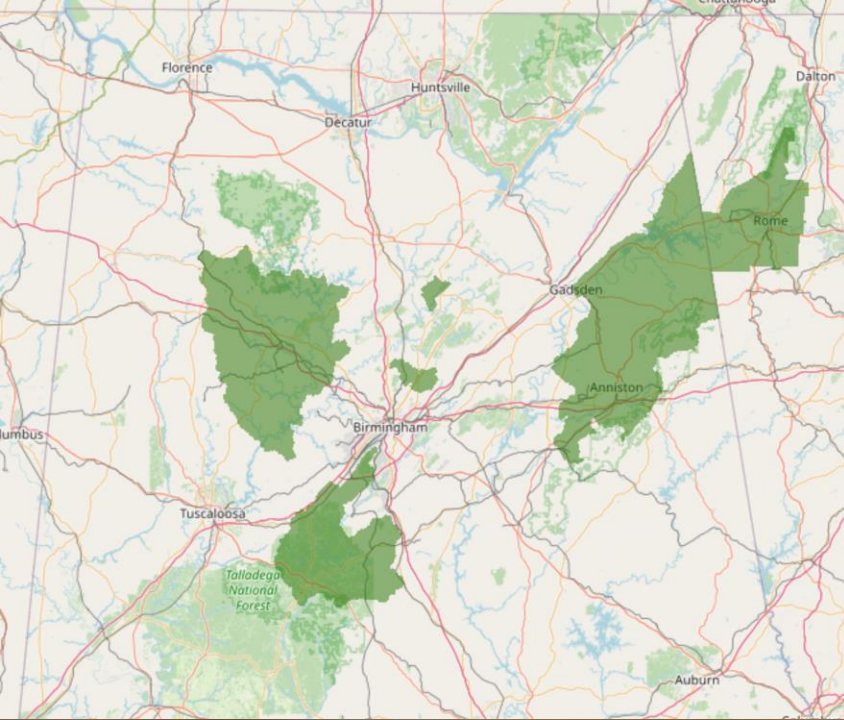
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# THREATENED: BLUE SHINER

- Currently distributed within three watersheds in Alabama:  
Choccolocco Creek, West Fork of the Little River, and Weoguka Creek
  - Only about 33% of range is occupied by public lands; most habitat is influenced by private landowners not subject to same levels of protection
  - Habitat includes cool, clear, small to medium-sized rivers over sand, gravel, or rubble substrate in pools, backwaters, and areas of moderate current
  - Types of project activities to consider:
    - Bridge Replacements/Removals/Modifications
    - Culvert Extensions/Replacements/Removals
  - Transportation Concern → Heavy siltation could reduce water quality; habitat degradation; incidental take/harm of individuals
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**SR-273 Over Daniel's Branch Cherokee County**



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# THREATENED: MOHR'S BARBARA'S BUTTONS

- Found on Ft. McClellan Army National Guard Training Center, Cahaba River National Wildlife Refuge, and lands owned and managed by The Nature Conservancy
- Occurs in open, wet, prairie-like openings in pine-oak woodlands, along shale-bedded streams, and in meadows; woodland clearings may be natural or manmade; some populations occur in swales on roadsides or in utility line right-of-ways
- Bloom mid-May through June
- Types of project activities to consider:
  - Bridge Replacements/Removals/Modifications
  - Culvert Extensions/Replacements/Removals
  - Roadway Widening (additional lanes, safety widening, etc.)
  - TSMO Projects (trenching vs. boring)
  - Traffic Monitoring Poles
- Transportation Concern → Road widening, mowing, herbicide applications



# Lakeshore Parkway/Morgan Road Relocation Jefferson County



150

Readers Gap

Borah Ave

150

Oak St

Gary Ave

Lak

150

Little Shades Creek

14th St

150

Morgan Rd

Hillside Ave

Plum St

Pear St

Ball Ave

Manor Cir

New Ave

Logistics



Image Landsat/Corona.com

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# ENDANGERED/THREATENED: SEA TURTLES AND MANATEES

- Types of project activities to consider:

Bridge Replacements/Removals/Modifications

- Coordination is NOT just with ALDOT and USFWS...







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**NOW FOR THE CROWD FAVORITE...**

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# BATS AND TRANSPORTATION

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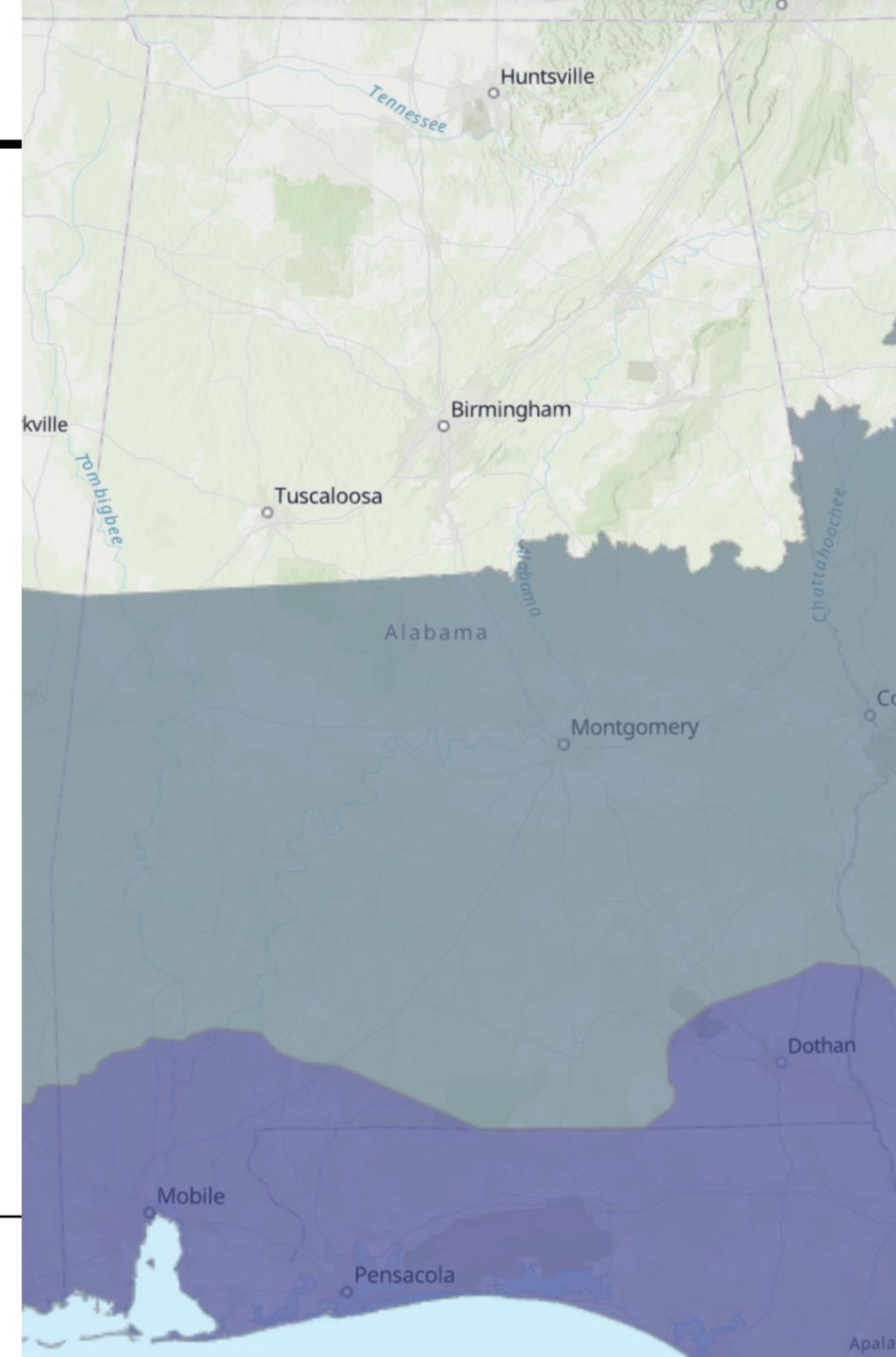
- Three listed species (Gray, Indiana, Northern Long-eared) and one proposed (Tricolored)
- Now a concern statewide
- Hibernating Zone vs. Year-round Active Zones
- Structure surveys and/or mist netting
- Types of project activities to consider:

Bridge Replacements/Removals/Modifications

Culvert Extensions/Replacements/Removals

Tree Clearing

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# WHERE BATS HAVE BEEN FOUND IN TRANSPORTATION STRUCTURES



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# THANK YOU

Emily Duke  
ALDOT Sr. Biologist  
Work Cell: (334) 659-6414  
[duke@dot.state.al.us](mailto:duke@dot.state.al.us)

