



College Level Scavenger Hunt--KEY

1. What percentage of the surface area of the state of Mississippi is in wetlands? 13%
2. How do migratory birds "know" when to migrate or, in other words, what environmental cue is used to time their migrations? *There is believed to be some hormonal stimulus to migrate, resulting, at least in the spring, in the development of the gonads. Other stimuli appear to involve temperature, daylight/darkness ratios and an internal clock*
3. Migration birds can use at least three very different types of information on navigation:
 - a. Which of these would be available on a clear night? *Stars*
 - b. Which of these would be available on a clear day? *Sun*
 - c. Which would be available even on a foggy day or night? *Geographical Landmarks; earth's magnetic fields*
4. Name four species of waterfowl that you can find as year-round resident of Mississippi.
 - a. *Wood Ducks*
 - b. *Mottled Ducks*
 - c. *Canada Geese*
 - d. *Mallards*
5. Name four North American bird species that are known or are presumed to be extinct. *Passenger Pigeon, Bachman's Warbler, Carolina Parakeet, Ivory-billed Woodpecker*
6. Name three large mammals that are not yet extinct, but that have been extirpated from Mississippi. *Red Wolf, Florida Panther, American Bison*
7. When did the dinosaurs go extinct? 65 mya
8. Ammonites are extinct relatives of the nautilus and other cephalopod mollusks. Describe the ammonite on display. *Pearly, large, spiral-like*
9. When was the Eocene Epoch of the Tertiary Period? *38-54 mya*

10. What was it like in Mississippi during the Eocene? *2/3 of Mississippi was submerged in a retreating sea during the Eocene. North, Central and North Eastern Mississippi were above sea level. Abundant sea life.*

11. Name two large marine mammals that swam in the ocean over Mississippi during the Eocene.

Zygorhiza kochii and Basilosaurus cetoides (both are prehistoric whales)

12. Titanotheres were hoofed mammals related to the rhinoceroses and horses. What kind of plant life might they have seen when they roamed Mississippi during the Eocene?

Mangrove, palm, sea grasses

13. When was the Oligocene Epoch of the Tertiary Period? *23-38 mya*

14. What was Mississippi like during the Oligocene? *Fewer deltas were present in Mississippi than in the Eocene. Mississippi was partially covered by the sea. The sea floor was colorfully rich in coral and bottom dwelling animals.*

15. How might the rhinoceros relative *Metamynodon* have used its prominent canine teeth?

Rooting for plants, Performance in mating rituals; display

16. When did the Pleistocene Epoch Occur? *11,000 years ago - 1.8 mya*

17. What climactic events occurred during the Pleistocene? *The advance and retreat of glaciers...a.k.a. "The Ice Age"*

18. Name five mammal species that lived in Mississippi during the Pleistocene that are now extinct. *Mastodons, Mammoths, Saber-Tooth Cat; Jefferson's Ground Sloth, Great short-faced Bear; The American Lion*

19. What is the scientific name of our national bird? *Haliaeetus leucocephalus*

20. Name four mammals that are on Mississippi's endangered list.

Vest Indian Manatee, Indiana Bat; Louisiana Black Bear; Gray Wolf;

21. Name an insect that is on Mississippi's endangered species list. *The American Burying Beetle*

22. In what kind of habitat might you find diamondback terrapins and marsh fiddler crabs?

A **marsh** is a type of wetland. Typically a marsh features grasses, rushes, reeds, typhas, sedges, and other herbaceous plants (possibly with low-growing woody plants) in a context of shallow water. A marsh is different from a swamp, which has a greater proportion of open water surface, and is generally deeper than a marsh. In North America, the term swamp is used for wetland dominated by trees rather than grasses and low herbs. You might find diamondback terrapins and marsh fiddler crabs in a marsh.

23. What causes the dark coloration of black water streams? Name two fish that are found only in black water streams. **Tannins from the plants**

24. What large aquatic salamander has tiny front and hind legs and eats crayfish, frogs, and small snakes? **Two-toed Amphiuma**

25. What aquatic salamander has external gills; tiny front legs, no back legs, and yelps when distressed? **The Lesser Siren**

26. How is an oxbow lake formed? **An oxbow lake forms from the cutoff of a stream meander.**

27. Name six fish that can be considered the "living fossils of the Mississippi River".

Pallid Sturgeon; Atlantic Sturgeon; Gulf Sturgeon; Short-nosed Gar; Long-nosed Gar; Paddlefish

28. Describe the process by which the loess hills were formed.

Loess is derived from glacial deposits, where glacial activity has ground rocks very fine (rock flour). After drying, these deposits are highly susceptible to wind erosion, and downwind or stream deposits may become very deep.

29. Name four kinds of invertebrate animals that you might find in the Mississippi delta wetlands.

Crayfish, snails, leech, grass shrimp; diving beetle; water scavenger beetle; mayfly nymph; fishing spider, water scorpion, whirligig beetle

30. Name three kinds of amphibians you might find in a woodland ravine. (Note: *Skinks and anoles are lizards.*) **Cricket frog; Fowler's toad; Marbled Salamander**

31. Name two lizards you might find in a woodland ravine. **Broad head skink; 5-line skink**

32. What is the largest freshwater turtle in the United States? **The Alligator Snapping Turtle**

a. Which is the smallest? **Common Musk Turtle**

b. Which is the largest? **Leatherback Sea Turtle**

33. How is the pupil shaped in pit vipers? **Cat-like-ellipse**

34. What venomous snake found in Mississippi has a round pupil? **The Coral Snake**

35. Name a flying mammal species that can be found in Mississippi.

Little Brown Myotis; Gray Myotis; Mississippi Myotis; Indiana Myotis; Mexican Freetail Bat

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BONUS: Aldo Leopold said "*When we see the land as a community to which we belong, we may begin to use it with love and respect.*"

A. What ways do you see yourself loving and respecting the land by how you are using it?_

(Reducing what you use; eating locally; carpooling; family planning; storm-water management; recycling, reducing urban sprawl, obeying hunting laws, etc...)

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