

## 2018 Area 5 Envirothon Wildlife

1. White-tailed deer occur in a variety of habitats and are generally considered an “edge” species. What is their primary food source in the winter?
  - A. Grasses such as tall fescue, Kentucky bluegrass, and timothy
  - B. Fresh growth on summer annual plants
  - C. **Woody browse such as the nuts, twigs, and buds of blackberry, oak, maple, and dogwood**
  - D. Cones and needles from white pine, Douglas fir, and blue spruce
2. Which of the following species is a true rattlesnake?
  - A. Northern Copperhead
  - B. **Eastern Massasauga**
  - C. Eastern Hog-nosed Snake
  - D. Eastern Black Kingsnake
3. Which of the following is not a concept used for managing and sustaining a healthy rangeland?
  - A. Rangelands are renewable resources, and they can produce on a sustained yield basis if properly managed to maintain soil and water quality
  - B. Rangeland production is determined by abiotic factors including soil, topography, and climatic
  - C. **Rangelands are available to all people to use how they see fit**
  - D. Rangelands produce a variety of products therefore, principles of multiple use are important in management
4. Which piece of legislation was key in shaping how public lands are managed to best meet the needs of the American people?
  - A. **Multiple Use and Sustained Yield Act of 1960**
  - B. National Environmental Policy Act of 1969
  - C. Wilderness Act of 1964
  - D. Taylor Grazing Act of 1934
5. Fire plays an important role in maintaining rangeland plant communities. Plants, animals, and insects in fire-adapted ecosystems have evolved mechanisms to tolerate or even benefit from fire. Which is not an adaptation to natural fire regimes?
  - A. Serotinous seed covers
  - B. Quick germination and regrowth
  - C. Thick bark
  - D. **Elevated meristems**

6. Throughout the years, many ecosystems that rely on natural wildfires have been suppressed to preserve human lives and structures. What is one long term ecosystem change as a result of the suppression of natural fire regimes?
- A. More balanced plant communities
  - B. Higher levels of available forage
  - C. **Invasion of vegetation not typically found there**
  - D. More available surface water
7. Invasive plants typically grow aggressively and can outcompete with native plant species. They often have little benefit to wildlife due to lack of nutrition and structure. What is the most predominant invasive species at this site?
- A. Bush Honeysuckle
  - B. Autumn Olive
  - C. **Tall Fescue**
  - D. Reed Canarygrass
8. This site is an example of what kind of habitat?
- A. **Edge habitat**
  - B. Mature succession
  - C. Primary succession
  - D. Ideal habitat
9. To attract more wildlife to an area, improvements to the existing vegetation are usually needed to better provide for their basic needs. What would be the Best Management Practice to improve this site for early successional species of wildlife?
- A. **Remove invasive bushes and grasses, and plant native wildflowers and grasses**
  - B. Plant more trees
  - C. Mow everything except the woody vegetation
  - D. Remove undergrowth to create a uniform plant height
10. Many species of game birds in Ohio have exhibited a long-term decline over the last 50 years. Northern bobwhite quail, ringed-necked pheasant, and ruffed grouse are a few of the most notable species. What is the cause for the overall decline in these populations?
- A. The Blizzard of 1978 and other severe weather events
  - B. Coyotes eating adult birds and turkeys eating eggs
  - C. **Large scale changes in land management**
  - D. Avian influenza
11. Which bird of prey listed below winters in Ohio, and is commonly observed flying low to the ground over open fields with a noticeable white patch above its tail?
- A. American Kestrel
  - B. Cooper's Hawk
  - C. **Northern Harrier**
  - D. Red-tailed Hawk

12. Identify the wildlife structure located on this site. What wildlife habitat practice does this best resemble?
- A. Hinge-cut trees
  - B. **Brush pile**
  - C. Wildlife browsing station
  - D. Ruffled grouse nesting structure
13. Chronic Wasting Disease, which is a serious disease in wild cervids, causes the breakdown of neurological material in infected individuals. Infected animals often do not display symptoms until 1.5 -2 years after initial infections. Chronic Wasting Disease is caused by what agent?
- A. Bacteria
  - B. Virus
  - C. Fungus
  - D. **Prion**
14. Ohio has several species of waterfowl that nest in the state. Depending on the species, various techniques are used to increase their carrying capacity or nesting success. One wildlife management technique that has been used very successfully across Ohio has been the erection of wood duck boxes and their subsequent utilization by wood ducks. Ohio does have another species of waterfowl that is also a cavity nester and commonly uses wood duck boxes to nest. What is that species?
- A. Ruddy Duck
  - B. **Hooded Merganser**
  - C. Gadwall
  - D. Blue-winged Teal
15. Many species of birds are precocial, including some which use wetlands. What impact does this have for wetland managers?
- A. Managers need to avoid destroying nesting cover longer, since young birds are still in the nest.
  - B. Larger blocks of habitat are required since these birds are nesting in colonies.
  - C. Open pockets of water adjacent to nesting sites will provide hunting grounds for the adults to catch food for the young.
  - D. **Managers should time draw downs in order to maximize brood cover and high protein food sources.**
16. A rare member of the order Chiroptera can be sighted in forests and open habitats such as river corridors and wetlands while feeding on insects. This insectivore is rarely found in caves, but instead uses trees for roosting. Which of the species below would fit this description?
- A. Streamside salamander
  - B. **Little Brown Bat**
  - C. Eastern screech owl
  - D. Purple Martin

17. Aldo Leopold is the father of modern conservation, and by writing "A Sand County Almanac" he has influenced modern conservation policy, science and ethics with the idea of 'Land Ethic'. What is Aldo's idea of Land Ethic?
- A. The idea that your community has access to the available water, soil, plants and animals for the benefit of the community and economic growth.
  - B. The idea that your land is available to you for the benefit of your family and economic growth.
  - C. The idea that your community includes the water, soils, plants, and animals; each of which deserves to be loved and respected.**
  - D. The idea that each individual has the right to do whatever they want with the land as they see fit for their own needs.
18. Many woodland animals depend upon natural cavities or hollows for nesting and roosting sites. Which of the following woodland species is NOT considered a secondary cavity user?
- A. Black-capped chickadee
  - B. Common flicker**
  - C. Gray squirrel
  - D. Raccoon
19. Delayed implantation takes place when the embryo does not plant immediately following fertilization but remains in a state of suspended growth or diapause. A diapause allows for birth to occur during the most favorable conditions. Which native, wild mammalian species below is associated with delayed implantation?
- A. Gray Fox
  - B. Black Bear**
  - C. Bobcat
  - D. Fox squirrel
20. Signed into law on September 2, 1937, which one of the following Act's created an 11% excise tax on sporting arms and ammunition? This money is provided to states as federal aid for the management, acquisition, restoration and maintenance of wildlife habitats and for wildlife studies.
- A. Lacey Act
  - B. Endangered Species Act
  - C. Dingell-Johnson Act
  - D. Pittman-Robertson Act**
21. Glochidia are an important phase in the life cycle of a(n):
- A. Aquatic insect
  - B. Freshwater mussel**
  - C. Juvenile fish
  - D. Crayfish

22. Structures for wildlife provide critical habitat components for wildlife. What is one of the biggest benefits that a brush pile provides to small game species?
- A. **Protection from predators and harsh winter weather**
  - B. Creates travel corridors
  - C. Increased predator denning
  - D. Reduce berry producing bushes
23. Identify the family of the animal skin labeled #1
- A. **Mustelidea**
  - B. Felidae
  - C. Canidae
  - D. Mephitidae
24. Identify the species of amphibian in the pictured #2
- A. Mudpuppy
  - B. Pickerel Frog tadpole
  - C. Marbled Salamander
  - D. **Spotted Salamander**
25. Identify the track labeled #3
- A. Muskrat
  - B. Fox Squirrel
  - C. American Beaver
  - D. **Virginia Opossum**