

## Envirothon 2022 Wildlife

1. Delayed implantation is a reproductive process when a fertilized egg lays dormant in the uterus. Delayed implantation results in longer gestation periods. This phenomenon allows births to occur when resources are abundant. Which species below does not reproduce with delayed implantation?
  - a. River Otter
  - b. Black Bear
  - c. Striped skunk
  - d. Coyote
2. This Ohio Endangered species is one of our more easily identified raptors with its white rump. This raptor hunts low over grasslands, with wings held in a distinctive dihedral (V-shape). This species is:
  - a. Broad-winged Hawk
  - b. Osprey
  - c. Northern Harrier
  - d. Rough-legged Hawk
3. Mallard ducklings can move around on their own soon after hatching. They follow their mother but find their own food. This development stage is called:
  - a. Precocial
  - b. Semi-precocial
  - c. Altricial
  - d. Semi-altricial
4. Which of the following is NOT true about the Pittman-Robertson Act of 1937?
  - a. It is an excise tax on the sale of firearms and ammunition
  - b. These funds are used to help wildlife conservation
  - c. It was proposed when many wildlife species populations were declining or disappearing
  - d. It is an excise tax on the sale of fishing equipment and tackle
5. Native Prairie grasses have deep roots to reduce erosion, provide brood-rearing and nesting cover, and provide food source for many wildlife species. Which species listed below is NOT a native warm-season prairie grass species?
  - a. Indiangrass
  - b. Switchgrass
  - c. Orchardgrass
  - d. Little Bluestem

6. Standing dead trees provide habitat for many different types of wildlife, including woodpeckers, raccoons, owls, and a myriad of insects and invertebrate decomposers. What is the correct forestry term for these dead trees?
- Stumps
  - Standing debris
  - Snags**
  - Pole-sized
7. In 1904, settlement continued, and forest lands were converted to cropland, and this species was extirpated from Ohio. In 2017, this gamebirds population was estimated to be around 200,000 birds. This species is the:
- Ring-necked Pheasant
  - Bobwhite quail
  - Wild turkey**
  - American Woodcock
8. In many areas of Ohio, the landscape is covered with small woodlots adjacent to agriculture fields. A beneficial silvicultural practice to conduct for the benefit of many wildlife species is to clear cut the perimeter of the forest habitat (usually 50feet to 150 feet) to allow for early successional plant species growth, and this provides a gradual transition from openland to forest habitat. The early successional plant growth provides a variety of food and shelter resources for a diversity of wildlife species. What is this practice called?
- Clear cut
  - Select cut
  - Edge feathering**
  - Diversity cut
9. Today many waterfowl species have recovered from market hunting and habitat loss and are considered common. Which species was reintroduced in the 1960's and raised on state wildlife refuges to increase their population?
- Trumpeter Swans
  - Mute Swans
  - Giant Canada Geese**
  - King Rails
  - Wood duck
10. This tall wetland grass is extremely invasive. It is often found in ditches, wetlands, and stream banks in the Lake Erie watershed. Once established, it is difficult to control and often takes years of persistent removal. What is this grass?
- Reed grass**
  - Narrow leaved cattail
  - Orchard grass
  - Big broom-stem

11. Butterflies and moths have many similarities but a few distinct differences. In general moths fly at night and butterflies are active during the day. Moths have fat, fuzzy bodies, while butterflies are much more brightly colored in comparison. Moths create a cocoon, which is soft, often silky or hairy and often attached to down logs and limbs. Butterflies create a specialized case in which the caterpillar transformed to adults. What is the name of this specialized case that the butterfly caterpillar makes to transform into an adult butterfly?

- a. **Chrysalis**
- b. Metamorphic sack
- c. Egg
- d. Proboscis
- e. Leather Nest

12. White-tailed deer contract various diseases that are capable of harming and in some cases killing them. Recently a progressive, fatal, degenerative disease has made its way into eastern populations of both wild and captive herds of white-tailed deer. This disease was first detected in deer in northeast Colorado in 1967. The Ohio Division of Wildlife does annually monitor the deer herd for this disease. What is the name of this disease that is in the same group of diseases such as scrapies in sheep and goats and is contracted in elk, mule deer, white-tailed deer and moose populations?

- a. Hoof and mouth disease
- b. **Chronic Wasting Disease**
- c. Lyme Disease
- d. Bovine Tuberculosis

13. As Ohio's habitats have changed, so has the wildlife that exists there. Which of the following species was not originally found in Ohio but currently inhabits all of Ohio's 88 counties?

- a. black bear
- b. **coyote**
- c. great horned owl
- d. wild turkey
- e. all the above
- f. none of the above

14. This animal is often found near rivers, ponds, and wetlands like the ones located here. It is known for its aggressive hunting techniques to capture its prey. Identify this species by looking at the pelt on the table.
- a. Muskrat
  - b. Mink
  - c. River otter
  - d. Beaver
15. Which animal other than humans can change its habitat to suit all its life's needs. This animal is also considered a key stone species.
- a. Muskrat
  - b. Mink
  - c. River otter
  - d. Beaver
16. Habitat is the key to wildlife survival. The number of animals a habitat can support throughout the year without damage to the animals or the habitat is known as?
- a. carrying capacity
  - b. density
  - a. population dynamics
  - b. stocking rate
17. Building nest boxes is an easy way that humans can improve nesting habitat and bring more birds to their yards. What native species is this nest box designed for and is most likely to be found using it?
- a. American robin
  - b. Downy woodpecker
  - c. Red-winged blackbird
  - d. Eastern bluebird
18. Invasive bird species often compete with our native birds for cavities in trees and bird houses to build their nests. The invasive species often nest earlier in the year and will remove native bird eggs from ideal nesting locations. What invasive species is most likely to be found competing for this nest box?
- a. European starling
  - b. Black swan
  - c. Rock pigeon
  - d. House sparrow

19. There many types of wetlands. Water depth, longevity of saturation, and vegetative composition are some of the characteristics used to describe various wetland types. Based on the habitat requirements of amphibians, which wetland type would be best for amphibian reproduction?
- Open water pond
  - Wet Meadow
  - Vernal pool
  - Wet woods
20. Poor forest management techniques have affected oak regeneration and the availability of hard mast producing trees. Over time these methods have caused the oak/hickory forest type to change to beech/maple forests. Oak trees also require proper sunlight through the forest canopy as well as long term forest management planning to sustain this valuable food and forest product resource. How many species of invertebrates utilize acorn for food in the U.S.?
- > 100
  - <20
  - >1000
  - 55
21. Many factors may be attributed to the rise of some tick population suck as global warming, changes in plant community's and even migratory birds. *Borrelia burgdorfei*, is the bacteria carried by this insect that can give dogs and humans Lyme disease.
- Common dog tick
  - Lone-star tick
  - Brown recluse
  - Black-legged Deer tick
22. According to the University of Minnesota, there is no evidence that \_\_\_\_\_ ever inhabited the Great Lakes region before European settlement. Even if they did, the glaciers killed any native North American species in our region. For the last 11,000 years since the glaciers receded, Great Lakes forest ecosystems developed without these animals. Individuals living here now have been inadvertently introduced from other countries and spread throughout the North American soil via agriculture, horticulture and fishing. Their subsequent impact on North American soil has been both favorable and detrimental. While these creatures can be good for agriculture (soil aeration to a small extent), they can be devastating to northern forests by changing the soil structure, reducing nutrient availability, and reducing understory plant species. Fill in the blank with the following correct answer.
- Sowbugs
  - Earthworms
  - Mealworms
  - Eastern box turtles

23. Bioaccumulation of toxins in the environment and their effects on wildlife began to come up in discussions across the nation when Rachel Carson, a famous environmentalist, made a name for herself after authoring *Silent Spring* in 1962. It's believed that bioaccumulation occurred in many birds, particularly raptors, thus hindering their ability to produce viable eggs. Which avian species is claimed to have suffered great losses, but thanks to responsible human intervention, has since made a dramatic comeback in Ohio and across the United States including Alaska?
- Eagle owl
  - Turkey vulture
  - California condor
  - Bald eagle**
24. Riparian corridors are stretches of forested land that cloak stream and river banks. These corridors are important natural filters protecting streams and rivers from excessive sedimentation, potential polluted surface runoff and erosion. Which one of these Ohio native species would be most affected negatively by sedimentation and silting of a stream or river?
- Smallmouth Bass**
  - Tilapia
  - Common Carp
  - Green Sunfish
25. How many marsupials are found in Ohio?
- None
  - One**
  - Two
  - Three
  - Four
26. Unlike most ancient species of wildlife, turtles have remained relatively unchanged through time. Eleven varieties of turtles inhabit Ohio. Of these which is the most terrestrial?
- Blanding's turtle
  - common musk turtle
  - eastern box turtle**
  - red-eared slider
27. This assembly of nest structures is designed to attract a particular species of colony nesters. The animals that use them often return to Ohio in April and are welcomed by landowners to help control the flying insect populations. What animals are most likely to use these nest structures?
- Little brown bat
  - Acadian flycatcher
  - Purple martin**
  - Ovenbird

28. This large, non-native waterfowl species comes from Europe. It was introduced to North America in the mid-1800's to adorn parks and large private estates. These birds are aggressive competitors with other native waterfowl for both food and nesting habitat. Name this species.
- Trumpeter swan
  - Tundra swan
  - Black swan
  - Mute swan**
29. Rivers and streams and the associated riparian areas provide important travel corridors during migration for what type of wildlife?
- Upland game birds
  - Neotropical migrants**
  - Rodents
  - Large mammals
30. Zoology is the biological science that deals with animals. Within Zoology there are many specialties, one is ichthyology. An ichthyologist studies what type of animals?
- Birds
  - Amphibians
  - Fish**
  - Insects
31. This state endangered amphibian, found only in the highest quality streams throughout Ohio, uses its wrinkled skin as the major organ of oxygen/carbon dioxide exchange. Due to the sensitivity of this amphibian to poor water quality it is highly unlikely to be found in streams affected by non-point source pollution and sedimentation.
- Eastern cricket frog
  - Mudpuppy
  - Hellbenders**
  - Fowler's toad
32. What item is the most thrown away item?
- Paper
  - Plastic**
  - Cardboard
  - Glass
33. A circular economy follows the
- Take, make, waste
  - Make, take, return**
  - Reduce, reuse, recycle
  - Make, take, waste

34. In 2018 the EPA conducted a series of roundtables with stakeholders to seek assistance to help improve \_\_\_\_\_in the United States?

- a. Hazardous waste management
- b. Brownfield development
- c. The recycling system
- d. Refuse collection

35. What industry is the leading consumer of water?

- a. Manufacturing
- b. Natural gas fracturing
- c. Agricultural
- d. Hydroelectricity