

# AREA 2

## Envirothon Questions for **Wildlife** Station

May 3, 2017 (Duration: 1 hour 50 min. Score: 100)

Score: \_\_\_\_\_

1. Consult prop station #4. Use the field guide to identify the nest located in the shrub. Consider the habitat and construction materials.

- A. American Robin
- B. Goldfinch
- C. Mourning dove
- D. Cardinal

Score: \_\_\_\_\_

2. Consult the flagged off area, prop station #8. Which of the following is most likely to live its entire life in this habitat?

- A. Meadow Vole
- B. Mourning Cloak
- C. Mayfly
- D. Striped Skunk

Score: \_\_\_\_\_

3. The flagged tall grass in prop station #10 is an invasive species that takes over wetlands crowding out native plants and impacting wildlife. What is the name of this plant?

- A. *Lythrum salicaria*
- B. *Phragmites australis*
- C. *Phalaris arundinacea*
- D. *Polygonum cuspidatum*

Score: \_\_\_\_\_

4. Consult prop station #11. This plant abnormality is formed by an insect laying an egg on the plant stem, which initiates increased production of normal plant growth hormones causing localized plant growth. The growth inducing organism develops inside the growth, continuing to feed and mature, completing its life cycle. This structure is known as a \_\_\_\_\_?

- A. Knob
- B. Gall
- C. Abscess
- D. Cocoon

Score: \_\_\_\_\_

5. Observe the tree in prop station # 12. There are several species of organisms covering the trunk. Identify the organism that is most prominent.

- A. Moss
- B. Fungus
- C. Lichen
- D. Liverworts

6. Consult prop station #1. This furbearer is cited as one of the prime forces motivating exploration and European settlement of the U.S. and Canada. Its numbers were drastically reduced and it was extirpated by the 1830's. A change in wildlife management practices has been instrumental in allowing this animal to re-establish a thriving population in Ohio. To which animal does the pelt in prop station #1 belong?
- A. Mink
  - B. Beaver
  - C. Muskrat
  - D. River otter
7. Consult prop station #2. Identify the animal that left this scat and these tracks behind?
- A. Rabbit
  - B. Squirrel
  - C. Groundhog
  - D. Muskrat
8. This primarily terrestrial amphibian requires vernal pools for breeding. Using prop #3, identify the amphibian by its call.
- A. Wood Frog
  - B. Spring Peeper
  - C. Grey Tree Frog
  - D. Green Frog
9. Consult prop station #5. Use the key provided to identify the skull.
- A. Rabbit
  - B. Shrew
  - C. Muskrat
  - D. Opossum
10. Skull morphology can help identify the feeding habits of wildlife. Observe the teeth of the skulls in prop station #6. Which of these skulls belongs to an herbivore?
- A. Skull A
  - B. Skull B
  - C. Skull C
  - D. Skull D
11. The bio facts in prop station #7 belong to a common avian species with special adaptations that make it a fierce forest predator including supreme vision, silent flight, blind hearing and lethal feet. Name the species.
- A. Red-tailed Hawk
  - B. Swallow-tailed Kite
  - C. Great Horned Owl
  - D. American Kestrel

12. Invasive plant species have disrupted ecosystems and have been limiting factors on populations of both native plant and animal species. One example, Garlic Mustard, has adversely affected this species of butterfly because its smell entices the organism to lay its eggs on it, thus eliminating the ability for larva to survive and complete its life cycle.
- A. Spicebush Swallowtail
  - B. Mourning Cloak
  - C. Viceroy
  - D. West Virginia White
13. The arrangement of plants and animals in taxonomic groups according to observed similarities is known as classification. Which is the correct order to the seven ranks of classifying organisms?
- A. Phylum – Kingdom – Class – Order – Family – Species – Genus
  - B. Class – Phylum – Kingdom – Species – Family – Genus – Order
  - C. Kingdom – Phylum – Class – Order – Family – Species – Genus
  - D. Kingdom – Phylum – Class – Order – Family – Genus – Species
14. A forest with an average yearly temperature of 50 degrees and 30-50 inches of rain that is inhabited by a variety of wildlife as well as numerous species of trees, shrubs and flowers is an example of a/an \_\_\_\_\_?
- A. Community
  - B. Population
  - C. Ecosystem
  - D. Environment
15. Rocky Cliff faces are the natural habitat of this species, however it has learned to thrive upon the expansion of human civilization by showing preference to comparable man-made structures in cities. In order to hunt from cliff faces it has adapted to have incredibly fast flight, surpassing even cheetahs during a dive; and possessing baffles to protect their skulls from the intense pressure of such a dive. It can be challenging to grab prey mid-flight, so it has also adapted to use its feet to provide a swift blow to prey knocking them out of the sky and making for a much easier meal.
- A. Cliff Swallow
  - B. Rock Pigeon
  - C. Peregrine Falcon
  - D. Sharp-shinned Hawk
16. This species subsists primarily on the carcasses of other dead things, spending time in unclean environments and feeding in equally unclean ways. It has adapted to be bald, to have large nostrils, and to regurgitate as a defense mechanism; allowing it to survive in this type of habitat and in ways that many other species cannot.
- A. Bald Eagle
  - B. Turkey Vulture
  - C. Wild Turkey
  - D. Red-tailed Hawk

17. Butterfly caterpillars feed on specific plants called host plants. Every butterfly has a specific host plant or plants that it feeds on. For example, the monarch caterpillars feed on milkweed plants. How do the adult female butterflies know they are on the right plant to lay their eggs?
- A. They taste the plant with chemo-receptors on their feet.
  - B. They smell the plant from the air using their antennae.
  - C. They recognize the leaf shape by sight.
  - D. They feel the plant by brushing their wings against it.
18. By the mid-1900's in Ohio, most mature American Chestnut trees had been destroyed by chestnut blight and many elm trees were dying from Dutch Elm disease. More recently, Emerald Ash Borers caused widespread destruction of ash trees. This is an example in the reduction of the forest's \_\_\_\_\_.
- A. Equilibrium
  - B. Biodiversity
  - C. Biomass
  - D. Communities
19. The Eastern Spiny Soft Shell turtle is a reptile that has been spotted at this site. What is its preferred habitat?
- A. Stagnant ponds
  - B. Large, fast moving rivers
  - C. Vernal pools
  - D. Any shallow water source with sandy or muddy substrate
20. Nearly 80% of an Eastern Bluebird's diet consists of insects. They also require cavities for nesting. Taking these factors into consideration, what type of habitat would be the most beneficial for placing bluebird nest boxes?
- A. Dense forest
  - B. Mowed area with no trees or shrubs
  - C. Water edge
  - D. Old field adjacent to forest edge
21. At this time of year many animals are having young. While mowing the grass in your yard, you uncover a nest of Eastern Cottontail rabbits with no apparent mother in the area. The young are uninjured. Your best course of action would be to:
- A. Re-cover the nest with grass and leave them alone
  - B. Comfort the frightened young by placing them in a towel lined box while you drive them to a licensed rehabilitation expert
  - C. Move the young to a more convenient location
  - D. Take them inside and feed them milk
22. Healthy meadows and prairies consist of a wide variety of grasses and plants which provide food and habitat for countless species of animals. Which of the following methods are being used to maintain healthy meadows and prairies?
- A. Prescribed or controlled burning
  - B. Large animal grazing
  - C. Periodic mowing
  - D. A and C
  - E. All of the above

23. Hubbard Valley Lake, just on the other side of the dam, is considered public waters of the state of Ohio. What are the licensing requirements, if any, for this popular fishing area in Medina County Park District?
- A. No fishing license is required
  - B. Fishing license required for anyone over the age of 12
  - C. Fishing license required for anyone 16 and older
  - D. Fishing license required for anyone age 16-65
24. In 2002 the beetle *Agrilus planipennis* was introduced into the U.S. from Eurasia, purportedly on wood used for stabilizing cargo in ships or for packing or crating heavy consumer products. The beetle lays eggs on trees and larvae bore into the cambium layer to feed on the transportation tissues of the tree, disrupting the movement of nutrients and water within the tree. Now considered the most destructive forest pest ever seen in North America, this beetle is devastating forests in nearly 30 states and provinces in the U.S. and Canada. The tree is a member of the \_\_\_\_\_ genus.
- A. Oak
  - B. Maple
  - C. Sycamore
  - D. Ash
25. Correctly identify this species also known as a razorback or piney woods rooter. This invasive species has proven detrimental to both human and natural resources. It is responsible for damage to and destruction of crops, rooting, reduced water quality, erosion, omnivorous and unspecified predation, competition, and serves as a vector for more than 30 bacterial diseases and 37 parasites that are zoonotic.
- A. Allegheny Wood Rat
  - B. Eastern Mole
  - C. Emerald Ash Borer
  - D. Feral Swine
26. The integrating of pollinator habitat such as hedge rows, flowering field borders, and beetle banks on farms can help sustain populations of which native pollinators?
- A. Honey Bees
  - B. Bumble Bees
  - C. Sweat Bees
  - D. B & C
27. Salamanders are amphibians found in a variety of habitats but requiring specific resources to carry out important functions such as maintaining moisture in their skin for purposes such as breathing, hydration, protection, and as a barrier to germs. Coincidentally these moist environments can also be breeding grounds for a fungus that has historically caused large salamander die-offs. What fungus do scientists need to test for and manage in local salamander populations?
- A. Batrachochytrium salamandrivorans
  - B. Salamandrivorans batrachochytrium
  - C. Batrachochytrium dendrobatidis
  - D. None of the above

28. This bird, which bred from central Manitoba to Kentucky, was nearly driven to extinction in the early 1900's. Reintroduction programs, throughout many states, helped to reestablish this population. These programs were so successful that this bird is now considered a nuisance.
- A. Ring-billed Gull
  - B. Giant Canada Goose
  - C. House Sparrow
  - D. European Starling
29. In 1979 there were only four breeding pairs of Bald Eagles in Ohio. The widespread use of DDT in agriculture and for mosquito control was a major factor in the species decline since the chemical caused egg shell thinning. With the help of \_\_\_\_\_, signed in 1973, the species rebounded and we now have a recorded 207 breeding pairs of Bald Eagles in Ohio.
- A. Endangered Species Act
  - B. Migratory Bird Treaty Act
  - C. Clean Water Act
  - D. Clean Air Act
30. Under the federal Endangered Species Act, *Myotis sodalis* is listed as endangered in Ohio due to summer and winter habitat loss, use of pesticides, and an introduced fungal disease. What is the common name of this species?
- A. Kirtland's Warbler
  - B. American Burying Beetle
  - C. Indiana Bat
  - D. Rusty-patch Bumble Bee