**2025 Iowa Envirothon State Wildlife Exam Team_____**

Each Question is worth three points – 75 points possible

1. Listen to the bird call provided by the station leader. Which bird species are you listening to? _____

   A. American Robin
   B. Black-capped Chickadee
   C. Blue Jay
   D. Blue-gray gnatcatcher
   E. Brown Thrashers
   F. Canadian Goose
   G. Chipping sparrow
   H. Eastern Meadowlark
   I. Red-winged blackbird
   J. Song Sparrow

2. According to the website "Amphibians and Reptiles of Iowa", which of the following is the primarily reason for the unique mix of amphibian and reptile species found in Iowa?
   A. Iowa is bordered by rivers on both the eastern and western sides, with the forests in the east transitioning to prairies in the west.
   B. Iowa is home to approximately 450 different soil types, which are identified by examining various physical properties.
   C. Iowa's annual rainfall typically ranges from less than 16 inches in the northwest to over 48 inches in the southeast, with an average of around 34 inches.
   D. Iowa has a variety of habitats that include tall grass and shortgrass prairies as well as boreal, temperate, and tropical forests.

3. _____is a disease that can affect wild and captive cervids (deer, elk, moose, and caribou) and is transmitted by a misfolded prion protein shed in saliva, nasal secretions, and other excreta.
   A. Cervid covid disease
   B. Foggy brain disease
   C. Chronic wasting disease
   D. White nose syndrome

4. _____ are omnivores that eat a wide variety of food dependent upon the time of year. In spring, they prefer sedges and grasses while in the summer, they prefer berries, grubs, ants, and ant pupae.
   A. Badgers
   B. Black bears
   C. Bobcats
   D. River Otters
   E. Short-tailed weasels

5. Snails, slugs, and bivalves, collectively known as_____, have soft, unsegmented bodies, and a muscular foot that helps them move around.
   A. Annelids
   B. Crustaceans
   C. Mollusks
   D. all of these are correct

6. _____ are the smallest member of the order Carnivora and are found across North America, Europe, and Asia. Although secretive and wary, they are aggressive and don't hesitate to attack prey bigger than themselves. They are small enough to fit into holes less than an inch in diameter. (see picture)
   A. American Mink
   B. Badgers
   C. Least weasels
   D. Long-tailed weasels
   E. Short-tailed weasels



7. Iowa native plants are organized by three ecosystem types that include _____.
   A. northern, central, and southern
   B. eastern, central, and western
   C. prairies, wetlands, and woodlands
   D. fens, potholes, and tall grass

8. Which group of Iowa's vertebrates have the largest number of different species currently existing within the state?
   A. Amphibians
   B. Birds
   C. Fish
   D. Mammals
   E. Reptiles

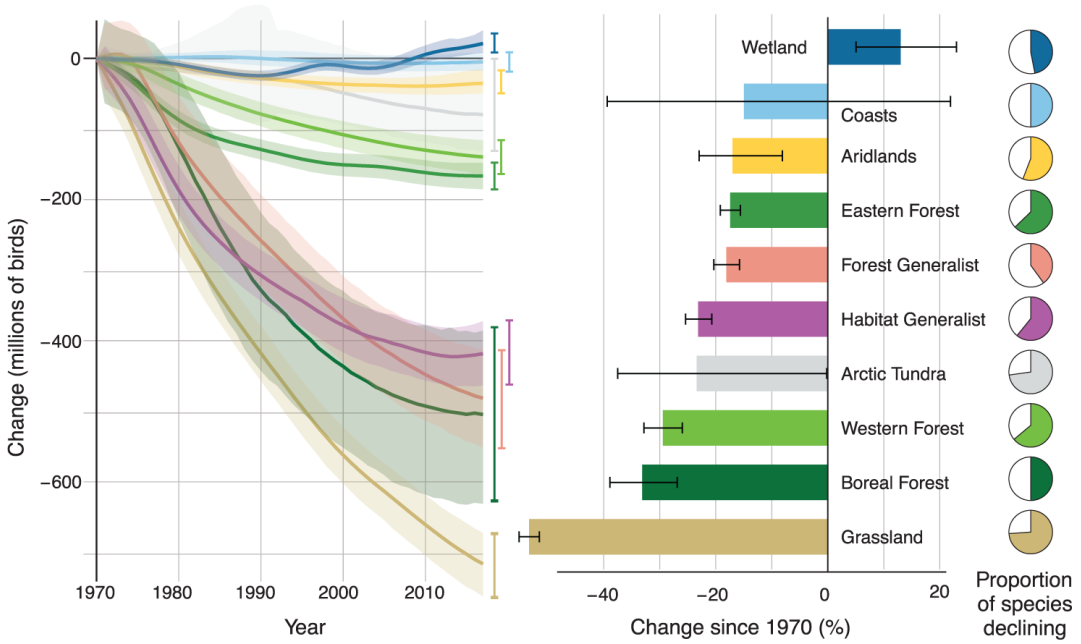
9. A Cornell University study that followed the Continental Breeding Adult population of North American birds from 1970 to 2020 shows that _____. (see next two charts)
   A. all bird habits types have experienced a population decline
   B. the rate of decline has accelerated over the fifty-year period.
   C. bird species in grassland habitats have experienced the highest percentage decline
   D. all bird habitats have experienced over a 15% population decline over the 50-year time span

E. all of these are correct




*Graphic by Jillian Ditner.*

## Population change in North American birds




SOURCE: ADAPTED FROM K.V. ROSENBERG *ET AL* / *SCIENCE* 2019 KNOWABLE MAGAZINE

10. The wild rose provides food for a variety of wildlife that eat the seeds, as well as the rose fruits which are called_____. These rose fruits remain on the rose plant through winter and provide a good source of vitamin C for wildlife.
    A. cheeks
    B. hips
    C. nodes
    D. sepals

11. Which species is the only oak species that was found in every Iowa county when the state was first settled?
    A. Bur oak
    B. Northern red oak
    C. Pin oak
    D. Prairie oak
    E. White swamp oak

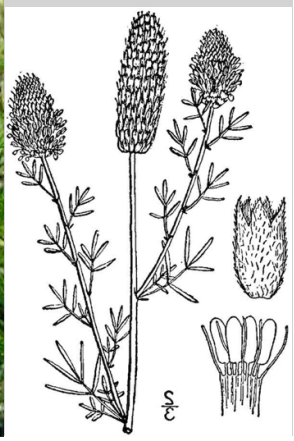
12. The presence of_____, a predator at the top of the food web, is essential to maintain the health of freshwater lakes, regulating minnow and sunfish numbers, which allows smaller animals like zooplankton to survive and control algae growth.
    A. American beavers
    B. grass carp
    C. largemouth bass
    D. whitetail deer

13. This eel is a long, slender snake-like fish with extremely small scales. What is the only member of the eel family found in North America?
    A. American Eel
    B. Canadian Eel
    C. Electric Eel
    D. Moray Eel
    E. None of these are found in North America

14. This bird species is a year-round Iowa resident. That means that all of its annual habitat requirements must be met in a small area. This species eats a wide variety of foods, including insects, soft or hard fruits, and seeds from annual and perennial plants including some crops. Food sources are only usable for this bird if they are in close proximity to shelter. The preferred type of shelter for this bird is shrubby vegetation. They have short lives, often living less than one year. They need a habitat that supports both winter survival as well as summer reproduction. Critical to helping this bird species to survive in Iowa are conservation practices that promote a diversity of plants and vegetation types on farms. What bird is this?
    A. Bluebird
    B. Northern Bob White
    C. Ring-necked Pheasant
    D. Red-winged Blackbird
    E. Wild Turkey

15. What is the common name for this native Iowa prairie plant (see picture)?
    A. prairie blazing star
    B. purple coneflower
    C. big bluestem
    D. purple prairie clover
    E. rattlesnake master



## Use the "Animal Skulls" book, the ruler to identify skull (Questions 16-17)

16. Use the "Animal Skulls – A Guide to North American Species" to identify the mammal skull provided. From pages 110-158, all skulls are pictured in order by size (from smallest to largest). Also include is the common name, scientific name, and typical "GL - Greatest Length of the skull." On page 35 there is an illustration of how to measure the "GL - Greatest Length of the skull. A ruler for measuring is also provided at this station. Each blank is worth one point.

    Common name_____ (1 point)

    Scientific name_____ (1 point).

    Typical (GL - Greatest Length of the skull) _____ mm (1 point)

17. Based on the skull features and teeth found on this skull, which of the following best describes this animal?
    A. Carnivore
    B. Herbivore
    C. Omnivore

**MATCHING: Match the definition with the appropriate word (Questions 18-21).**

A. bald eagle
B. braconid wasp
C. brumation
D. evolutionary
E. fossorial
F. generalists
G. hibernation
H. Iowa Pleistocene snail
I. lek
J. little brown bat
K. specialists
L. torpor
M. tri-colored bat
N. zebra mussel

_____ 18. This species is so rare that it is designated as "in danger of extinction" through the federal Endangered Species Act.

_____ 19. Three salamanders found in Iowa including the blue-spotted, tiger, and smallmouth salamanders are _____, meaning they are adapted for digging and live mostly, but not entirely, underground.

_____ 20. Certain vertebrate species are _____, meaning they can be found throughout Iowa in various habitats. They thrive in natural settings such as forests and grasslands, as well as in agricultural areas and urban parks. These highly adaptable animals can make their homes in many different environments.

_____ 21. This is a long-term voluntary state of lowered body temperature, slowed metabolism, reduced breathing rate, and even a decreased heart rate, usually lasting for months, that enables certain warm-blooded animals to endure winter when food supplies are limited.

## Animal Identification (3 points each):

Correctly identify each of the following native Iowa species (Question 22-25). Locate the numbers next to the animal tracks, mounts, or pelts at this station.

22. _____
23. _____
24. _____
25. _____

**Possible Answers for questions 21-25 include:**

American Badger
American Beaver
American Mink
Black-capped Chickadee
Black Bear
Blue-gray gnatcatcher
Bobcat
Brown Thrashers
Coyote
Chipping sparrow
Eastern Meadowlark
Eastern Spotted Skunk
Gray Fox
Least Weasel
Long Tailed Weasel
Mourning Dove
Muskrat
Northern Bobwhite
Ornate Box Turtle
Racoon
River Otter
Short Tailed Weasel
Red-winged blackbird
Song Sparrow