**2023 Wildlife Area Envirothon Questions**

1. This raptor can be found nesting in big cities throughout Ohio and is known to be one of the fastest animals on the planet. It reaches speeds that exceed 200 mph when pursuing prey. Name the correct raptor.
	1. Bald eagle
	2. **Peregrine falcon**
	3. Red-tailed hawk
	4. Great horned owl
2. Currently, there are six mammals listed as state endangered species. Select the appropriate answer below that lists these six species.
	1. **Black Bear, Allegheny Woodrat, Indiana Bat, Little Brown Bat, Northern Long-eared Bat, and Tricolored Bat**
	2. Bobcat, Trumpeter Swan, Black Bear, Indiana Bat, Tricolored Bat, and Allegheny Woodrat
	3. Peregrine Falcon, Allegheny Woodrat, Indiana Bat, Little Brown Bat, Northern Long-eared Bat, and Tricolored Bat
	4. Indian Bat,Little Brown Bat, Northern Long-eared Bat, Tricolored Bat, Fisher, Porcupine
3. One of the most severe diseases affecting honey bees is caused by spore forming bacterium, *Paenibacillus larvae*. Infected brood usually die at the pre-pupal or pupal stage. The disease is not treatable, meaning that destruction of the hive is the only management. What is this disease?
	1. Chalkbrood
	2. **American Foulbrood**
	3. Nosema
	4. Stonebrood
4. Which disease listed below is believed to be caused by abnormal, infectious proteins called prions? Until recently in Ohio, it was only found in privately held captive herds of Whitetail Deer. Currently it can be found in Ohio’s wild population in Wyandot, Marion and Hardin Counties.
	1. White-Nosed Syndrome
	2. Epizootic Hemorrhagic Disease
	3. Rabies
	4. **Chronic Wasting Disease**
5. Which of the species listed below was once listed as extirpated and later endangered, but now is currently considered to be common in Ohio?
	1. Black Bear
	2. **Bobcat**
	3. Eastern Harvest Mouse
	4. Badger
6. Black bears which are in the order Carnivora reproduce young every two years once they become mature. Peak breeding activity takes place from mid-June through mid-July. Once bred, each egg develops into a tiny ball of cells called a blastocyst. The blastocysts suspend further development until they implant in the uterine wall in November. After implantation, they rapidly develop and become cubs that are born in late January. This process is known as:
	1. Delayed cycle
	2. Delayed reproduction
	3. Paused implantation
	4. **Delayed implantation**
7. This bird species native to Ohio was once thought to be the most numerous bird in the world, with a single flock containing millions of individual birds. They were listed as extinct in 1914 when the last living bird named Martha died in the Cincinnati Zoo.
	1. **Passenger Pigeon**
	2. Swallow-Tailed Kite
	3. European Starling
	4. English Sparrow
8. Although seldom seen, the Southern Flying Squirrel is the most common squirrel in Ohio. Which of the following is a structural adaptation that the Southern Flying Squirrel uses to survive in its environment?
	1. **Gliding membrane**
	2. Nocturnality
	3. Bi-annual breeding
	4. Omnivorous diet
9. Using processes inside its body a Coyote can adjust its litter size based on available food or a higher-than-normal mortality rate. This is an example of which kind of adaptation?
	1. Structural adaptation
	2. **Physiological adaptation**
	3. Behavioral adaptation
	4. Subconscious adaptation
10. Factors such as the availability of food, water, shelter and space impact wildlife population size and growth. What are these factors are known as?
	1. Human factors
	2. Natural factors
	3. **Limiting factors**
	4. Prime factorization
11. ODNR Division of Wildlife regulates seasons and bag limits. These are put in place to ensure the survival of wildlife populations. Which of the below animals may be killed outside of its designated hunting season and in excess of its bag limit without a special permit if it is causing a nuisance?
	1. White-tailed Deer
	2. Bobcat
	3. **Raccoon**
	4. Canada Goose
12. Ohio is home to three venomous snakes, the Massasauga, Eastern Copperhead and the Timber Rattlesnake. All of Ohio’s venomous snakes share the following identifying traits **EXCEPT**?
	1. Head distinctly triangular, when viewed from above
	2. Elliptical pupils
	3. Pits as well as nostrils present
	4. **Divided scales on the underside of tail**
13. What is the world's most successful system of policies and laws to restore and safeguard fish and wildlife and their habitats through sound science and active management?
	1. The European Union Multi-Species Action Plan
	2. The South African National Park System
	3. **The North American Model of Wildlife Conservation**
	4. Argos Data Collection System
14. The following series of steps through which energy is transferred among organisms in an ecosystem is called a food chain. Please select the correct order of the following food chains.
	1. Fungi, eagle, snake, frog, Grasshopper, grass
	2. **Grass, grasshopper, frog, snake, eagle, fungi**
	3. Eagle, snake, fungi, grass, grasshopper, frog
	4. Frog, fungi, grass, snake, eagle, grasshopper
15. Epizootic Hemorrhagic Disease (EHD) is a deer disease that affects our herd mainly in areas where deer concentrate in large numbers. Deer that are infected usually develop symptoms about seven days after exposure. How is the disease transmitted to deer?
	1. Deer coming into contact with each other.
	2. Deer feeding at corn piles (bait sites).
	3. **Deer getting bit by a tiny insect known as a midge that’s infected with the disease.**
	4. Deer drinking water from a creek or pond.
16. Three swans exist in Ohio. Two are native and one is classified as an invasive species. This invasive swan destroys aquatic vegetation that our native waterfowl rely on as a food source to help complete their migrations. This swan also competes with our native swan for nesting territories. Which swan listed below is an invasive species?
	1. Trumpeter Swan
	2. **Mute Swan**
	3. Tundra (Whistling) Swan
	4. Whooper Swan
17. Canine distemper is a viral disease that infects raccoons, foxes, coyotes, skunks, and unvaccinated dogs. The disease is more likely to occur when populations are high and concentrated. What are common symptoms of distemper?
	1. **Discharge from the nose and eyes, emaciated appearance, and disorientation**
	2. Nice, shiny coat and healthy looking overall
	3. Runs away when approached
	4. Out during the day
18. Wildlife requires dense areas for escape cover and nesting. These areas usually consist of thick shrubby and woody habitat. What is the management practice called that creates a gradual transition zone between two habitat types?
	1. Prescribed burn
	2. Clear cut
	3. Mowing
	4. **Edge feathering**
19. What three birds are NOT a federally protected species under the Migratory Bird Treaty Act (MBTA)?
	1. Red-tailed Hawk, American Crow, Bald Eagle
	2. European Starling, Cardinal, Barred Owl
	3. **House Sparrow, European Starlings, Pigeons**
	4. Pigeons, Song Sparrow, Turkey Vulture
20. Wild turkey populations have declined in much of Ohio following several years of below average reproductive success. Because of this, the Ohio Division of Wildlife made changes to the spring and fall turkey seasons in 2022 so hunters can continue to enjoy pursuing wild turkeys in our state. What regulations were put in place to help boost the population?
	1. Hunting of wild turkeys is no longer permitted in Ohio in Zone 1 and Zone 4.
	2. Spring turkey hunting season was reduced from a four week long season to two weeks and baiting is no longer permitted.
	3. Only hens may be harvested and the spring season was shortened.
	4. **A reduction in the bag limit for the spring hunting season (2 bearded turkeys reduced to 1 bearded turkey) and a reduction in the fall hunting season length.**
21. The ODNR Division of Wildlife is the state agency with legislative authority to manage wildlife resources and the habitats they need for all Ohioans. A portion of the funding to manage these resources is allocated to states from funds collected through the Federal Aid in Wildlife Restoration Act of 1937, more commonly referred to as the

Pittman-Robertson Act, these funds are generated from which of the following sources?

* 1. Federal offshore oil leases
	2. Property taxes, income taxes and levies
	3. Fines collected from breaking laws concerning wildlife
	4. **Excise tax on firearms, ammunition, and archery equipment**
1. Which of the following tools is used most frequently by the ODNR Division of Wildlife to ensure wildlife populations do not exceed their carrying capacity?
	1. Birth control medications
	2. Habitat creation
	3. **Hunting**
	4. Culling
2. Amphibians and Reptiles are conveniently known as “Herpetofauna” for research purposes, although they are not closely related in biological evolution. Identify the common name of the reptile presented to you by the Herps Alive Foundation.
	1. **Red-Eared Slider**
	2. Common Map Turtle
	3. Common Snapping Turtle
	4. Midland Painted Turtle
3. This reptile is presented to you by the Herps Alive Foundation. This

temperature-dependent reptile lacks chromosomes that determine sex. Eggs that are incubated at temperatures between 22 and 27 degrees Celsius (72-80 F) become only males, while eggs that are incubated at warmer temperatures become females. There are distinct characteristics between the males and females of this species. Which of the following correctly identifies the biological sex of the reptile and the characteristic which identifies biological sex?

* 1. It is female, as determined by its eye color.
	2. It is male, as determined by its eye color.
	3. It is female, as determined by the length of its front claws.
	4. **It is male, as determined by the length of its front claws.**
1. Of the 19 Owl species regularly occurring in North America, 12 have been recorded in Ohio. Of those 12 recorded species, only 8 occur regularly. This owl, presented by Gryphon Den Creatures of the Night, is 1 of the 8 regularly occurring Ohio owls. Identify the common name for the Owl presented here.
	1. Great Horned Owl
	2. Barn Owl
	3. Short-eared Owl
	4. **Barred Owl**
2. There are 11 species of Bats regularly occurring in Ohio. All of these species are insectivorous and either nocturnal or crepuscular. This Bat, presented by Gryphon Den Creatures of the Night, is 1 of the 11 regularly occurring Ohio Bats. Identify the common name for the Bat presented here.
	1. Eastern Small-footed Bat
	2. **Evening Bat**
	3. Little Brown Bat
	4. Hoary Bat
3. This pelt is from the largest mammal in the Canidae family that currently lives in Ohio. It is currently known to exist in all 88 counties in Ohio including this location. What is it?
	1. Red fox
	2. **Coyote**
	3. Gray fox
	4. Grey wolf
4. Aves is a class of vertebrates which comprises all birds. Wildlife Officer Aaron Brown has provided you with three bird wings. Which bird’s wing listed below is NOT presented to you here?
	1. Blue-Winged Teal
	2. Gadwall
	3. Mallard
	4. **Wood Duck**
5. Laws, policies and acts have been put into place to protect our Nation’s wildlife. The four birds listed in question #28 are all protected by which of the following Acts?
	1. **The Migratory Bird Treaty Act of 1918**
	2. Pittman-Robertson (P-R) Act
	3. The National Wildlife Refuge System Administration Act
	4. The Treaty of Guadalupe Hidalgo of 1848
6. The pine trees you see at this site were most likely planted to help with soil erosion. The pine tree roots work to hold the soil in place and can thrive in most any soil conditions. These pine trees help prevent what from happening in the stream below?
	1. Prevent flooding
	2. Prevent plants from growing around the stream
	3. Prevent wildlife from using the stream
	4. **Prevent sediment from entering the stream**