**Wildlife**

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Oklahoma is home to an abundance of wildlife species. This diversity is evident by the unique ecosystems found throughout the state. From the Oak-Pine Forests and Cypress Bottoms in the southeast to the shortgrass high plains in the western panhandle, Oklahoma has a total of 14 vegetation types (Hoagland 2008). Each vegetation types provides resources to a variety of generalist and specialist animal species. All living things are dependent on other living things, and this is very evident when considering wildlife in Oklahoma.

The Regional Envirothon wildlife station will emphasize Oklahoma wildlife and natural resources. Students will be expected to have a basic understanding of regional species and their niches (habitat and role in ecosystem). In addition, wildlife learners should develop an awareness and knowledge of: adaptations of species to increase success in their environment, resources needed by wildlife, symbioses, concepts of carrying capacity and factors that increase or decrease population densities, impacts of invasive species, and the protection, conservation, and management of wildlife populations, especially those vulnerable to extinction.

The conservation effort in the United States is a unique story of struggle and survival, resulting in the many benefits we enjoy with wildlife today. Critical legislation such as the passage of the Pittman-Robertson Bill in 1937, along with many others, has resulted in abundant and flourishing wildlife populations across the state. It is interesting how activities by people can have such positive impacts to wildlife when the best interest of both is kept in mind.

**Objectives**

1. Identify the tracks, physical characteristics (skulls, furs, antlers, horns, etc.), movement patterns, and eating habits of common Oklahoma mammals, birds, fish, and reptiles.

2. Differentiate between endangered and threatened species and recognize species of each category.

3. Differentiate between game and non-game species and recognize species of each category.

4. Describe the habitat of Oklahoma mammals, birds, fish, and reptiles and recommend management practices for each habitat.

5. Illustrate a food web or energy flow diagram featuring mammals, birds, fish or reptiles.

6. Approximate the age of mammals by physical characteristics like tooth eruption and wear in deer

7. Differentiate between carnivores, herbivores, and omnivores

8. State three characteristics that distinguish mammals from all other animals.

9. Define the theory of natural selection and recognize instances where wildlife has adapted to changes in the environment.

10. State two characteristics that fish and reptiles have in common

11. Illustrate migration pathways that migratory fowl follow. Which flyway is Oklahoma in?

12. Describe predator prey relationships. What happens to the predator population when you increase the prey population and vice versa?

13. Describe factors that limit or increase populations. Discuss the concept of carrying capacity and limiting factors.

14. Discuss various ways the public and wildlife managers can help in the protection, conservation, management and enhancement of wildlife populations.

15. Describe major factors affecting threatened and endangered species and methods used to improve the populations of these species.

16. Understand the roles of wildlife in an ecosystem

17. Understand the various methods wildlife use to communicate and be familiar with the calls of various big game animals and game birds.

18. Understand the role of hunting in managing wildlife populations and some of the laws and regulations that direct such activities.

19. Understand the differences between native and introduced species and be able to identify such pelts and or skulls of various Oklahoma animals.

20. Discuss the potential impacts of introduction of a non-native species

**Be Familiar with the Following Animal Species:**

• Beaver

• Bobcat

• Black Bear

• Coyote

• Mink

• Muskrat

• Opossum

• River Otter

• Raccoon

• Prairie Dogs

• Cottontail Rabbit

• Whitetail Deer

• Mule Deer

• Turkey

• Bald Eagle

• Bobwhite Quail

**Legislation and Key People**

• Identify assisting agencies, programs, and laws that govern Oklahoma wildlife.

• Understand the Pittman-Robertson Act, Migratory Bird Act, Lacey Act, Dingell-Johnson Act and their impacts on wildlife management today.

• Discuss impacts made by key leaders such as Aldo Leopold, John Muir, Gifford Pinchot and their efforts in conservation.

**Suggested Review**

Review this information on the U.S. Fish and Wildlife website as well as the Oklahoma Department of Wildlife Conservation

1. Differentiate between habitat and niche.

2. Describe ways in which wildlife managers manage and/or manipulate wildlife habitats.

3. Understand why native wildlife require specific types of habitats.

4. Discuss how upland birds and mammals have adapted to their habitat to make the best use of their environment.

5. Understand the differences between annual, biennial and perennial plants.

6. Understand the process of succession and how this impacts wildlife.

7. Describe the potential impact of the introduction of non-native species.

8. Understand the four main elements of habitat (food, water, shelter, space).

9. Know differences between types of habitats found throughout Oklahoma and be able to discuss them.

10. How do we categorize wetlands? What is a grassland? What species may be found in them?

43

**Wildlife Sample Test Questions**

1. Which of the following is listed as both a state and federally endangered species? a. Topeka Shriner

b. Ute Ladies’-tresses

c. Swift Fox

d. Piping Plover

2. The bird to the right has a beak adapted for what? a. Tearing apart food

b. Cracking seeds and nuts

c. Sipping nectar

d. Proving in mud and shallow water

3. The Federal Aid in Wildlife Restoration Act is also known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. a. The Dedicated Conservation Act

b. Preston-Rogers Act

c. The Pittman-Robertson Act

d. The Wildlife Conservation Fund

**Reference Materials**

• Nebraska Game & Parks website > Focus on the Wildlife and Fisheries Pages: www.outdoornebraska.org

• NebraskaLAND Magazine. Wildlife Habitat Improvement Guide Vol. 69, NO. 1, January/February 1991

• Nebraska Wetlands: www.outdoornebraska.gov/nebraskawetlands

• U.S. Environmental Protection Agency (EPA): www.epa.gov/wetlands

• U.S. Fish and Wildlife Service website > Endangered and Threatened Species in Nebraska: o www.fws.gov/endangered

o www.fws.gov/species

o www.fws.gov/laws

o www.fws.gov/hunting

o www.fws.gov/birds/faqs

o Conservation Heroes: https://training.fws.gov/history/ListsHeroes.html

• Tekiela, S. 2003. Birds of Nebraska. Adventure Publications Inc. Cambridge, NY.

• U.S. Department of Agriculture (USDA) > National Invasive Species Information Centers: www.invasivespeciesinfo.gov

• eNature America’s Wildlife Resources: www.enature.com

• Pheasants Forever: www.pheasantsforever.org

• Ducks Unlimited: www.ducks.org

• Project WILD K-12 Curriculum & Activity Guide

• Nebraska Hunt Guide – available at any Nebraska Game & Parks Commission office.

Wildlife Sample Test Question Answers: A, B and C