

Wildlife 2006

Students should be able to:

- 1W Identify common wildlife species and wildlife signs.
- 2W Identify basic wildlife survival needs.
- 3W Describe specific adaptations of wildlife to their environment and their role in the ecosystem.
- 4 W Describe predator/prey relationships and identify examples.
- 5W Describe food chains and food webs and cite examples.
- 6W Describe factors that limit or enhance population growth.
- 7W Evaluate a given habitat and its suitability for a designated species when given a description of its habitat needs.
- 8W Describe ways a habitat can be improved for specific species through knowledge of its specific requirements.
- 9W Discuss the concept of carrying capacity and limiting factors.
- 10W Discuss various ways the public and wildlife managers can help in the protection, conservation, management, and enhancement of wildlife populations.
- 11W Describe the potential impact of the introduction of non-native species.
- 12W Describe major factors affecting threatened and endangered species and methods used to improve the populations of these species.

Suggested Core Activities

- After using local identification guides to identify the most common wildlife in your area, survey a local park, forest or school grounds for those types. For variation, repeat the survey at morning, midday, and evening and compare the differences. 1W
- Using the Animal Tracks website, students will collect, identify and preserve wildlife tracks for future study. 1W
- After downloading the PDF file “Basic Wildlife Survival Needs” from Texas Parks and Wildlife, students will present research on the basic requirements for wildlife survival, and give examples of why habitat loss is the main problem facing wildlife. 2W
- Students will create a powerpoint presentation showing specific adaptations of wildlife to their habitat, and their role in the ecosystem. 3W
- After downloading the electronic field trip “To Eat or Be Eaten”, students will outline the predator/prey relationships between the Rocky Mountain Elk and the wildlife living in the Yellowstone area. 4W
- Students will make a map of their local area forest or park, including wildlife inventories, tracks, habitat, food sources, and specific adaptations. 4F, 10F
- Students will create a display illustrating how the interdependence of the population within a food chain maintains a balance of plant and animal populations within a community. 5W
- After reading “Wildlife Populations” from the University of Minnesota, students will outline the factors that limit or enhance wildlife population growth. 6W

- Students will create a cottontail rabbit management plan for farmers to encourage cottontail rabbit populations along with their normal farm operations. 7W 8W
- Students will discuss how territoriality, reproductive strategies, and dominance hierarchies enhance a species survival, and how human activities can interfere with carrying capacity. 9W
- Students will present solutions to the following invasive species, and list steps for the national management plan for these species: Sea Lamprey, Zebra Mussel, Eurasian Milfoil, Purple Loosestrife. 11W
- Students will name the five categories for endangered species in Canada and list a bird or mammal for each category. 12W

Top Resources:

- Wildlife identification US Fish and Wildlife Service
<http://educators.fws.gov/educators.html> 1W
- Identifying and Preserving Wildlife Tracks
<http://www.42explore.com/animaltracks.htm> 1W
- Wildlife identification, endangered species, and invasive species <http://species.fws.gov/>
1W 11W 12W
- Canada wildlife identification and habitat
<http://www.hww.ca> 1W 7W 8W
http://www.ec.gc.ca/wild_e.html All
- National Wildlife Federation
<http://nwf.org/backyardwildlifehabitat/> All
- Wildlife links for educators US Fish and Wildlife
<http://deerflat.fws.gov/linksed.htm> All
- Basic wildlife survival needs Texas Parks and Recreation
http://www.tpwd.state.tx.us/publications/wildlife_habitat/education/urban/decline-survival.pdf 2W
- Winter animal adaptations Michigan State University Extension
<http://www.dsisd.k12.mi.us/mff/Environment/WinterAnimals.htm> 3W
- Animal Adaptations, Boreal Forest Network Canada
<http://www.borealnet.org/overview/wildlife.html> 3W
- Wildlife Populations University of Minnesota
<http://www.extension.umn.edu/distribution/youthdevelopment/DA6340.html> 4W
5W 6W 8W 9W 10W 11W
- Predator/Prey Relationships “Eyes of Yellowstone” Yellowstone Park Foundation
Sponsored by Canon

<http://www.ypf.org/partnerships/corporate.asp> 4W

- Create a Food Chain Canada Wildlife Act
<http://www.vt.aide.com/png/foodchains.htm> 5W
- Wildlife Survival Cottontail Rabbit Habitat Missouri Department of Conservation
<http://www.conservation.state.mo.us/manag/rabbit/index.shtml> 7W
- Carrying Capacity National Wildlife Federation
<http://enature.com/>
- Carrying Capacity World Builders
<http://curriculum.calstatela.edu/courses/builders/lessons/less/biomes/carryingcap.html>
9W
- Habitat Improvement
<http://www.in.gov/dnr/fishwild/hunt/open.html> 10W
- Invasive Species USDA
<http://www.invasivespecies.gov/> 11W
- Invasive Species US Fish and Wildlife 11W
<http://contaminants.fws.gov/Issues/InvasiveSpecies.cfm> 12W
- Species at Risk Canada
http://www.speciesatrisk.gc.ca/Q2_e.cfm 12W

Wildlife Extended Studies

Students will create a display outlining conservation oriented land use planning to preserve bird habitat.

- Cornell Lab of Ornithology All About Birds
<http://www.birds.cornell.edu/programs/AllAboutBirds/>
1W 2W 3W 6W 7W 8W 10W

Students will compare and contrast the following five wildlife habitat areas: Chesapeake Bay, The Dakota Prairie Potholes, The Lower Mississippi Valley, Central Valley California, and The Hawaiian Rain Forest. Students will describe the following for each location: wildlife populations, land descriptions, human destruction to the habitat, and solutions to the problem.

- US Fish and Wildlife Service
<http://patuxent.fws.gov/habitats.html>
2W 5W 6W 7W 8W 11W 12W

Students will examine the impact of the feral pig, an introduced animal, on the native Hawaiian plant and animal species. Research should be used from the following viewpoints: Conservation Environmentalist, Native Hawaiian Hunter, and Animal Rights Activist. Students will create a power point presentation detailing measures which should be taken so all sides are represented.

- <http://www.nevada.edu/~karla/>
8W 10W 11W 12W

Students will trace the history of how humans have affected wolves since the 1800s, and predict the future of wolf populations.

- <http://www.nwf.org/wildlife/graywolf/>
3W 4W 5W 6W 7W 9W 10W 11W 12W

Should the black footed ferret be re-introduced on the High Plains Public Lands?

Activity 1

- http://www.blm.gov/education/high_plains/index.html
All

Students will describe how the High Plains riparian areas being affected by energy companies, hunters, wildlife biologists, and ranchers.

Activity 2

- http://www.blm.gov/education/high_plains/activity2.html
All

Students will use an electronic field trip to study ecosystems and predator/prey relationships.

- <http://www.windowstowonderland.org/eobe/teacherinfo.shtml>
3W 4W 5W 8W