

## WILDLIFE STATION

### WILDLIFE ESSENTIAL TOPICS

References to "common and endangered wildlife species" refer to the attached list of habitat types and representative wildlife species, and the list of endangered wildlife species in Maine.

1. Relationships Between Habitat and Wildlife Species
  - a) Identification and Natural History of Common and Endangered Wildlife Species
  - b) Basic Components of Habitat for all Wildlife Species
  - c) Specific Habitat Requirements of Common and Endangered Wildlife Species
  - d) Classification of Habitat Types, Including Relationships Between Soil Type and Vegetation
  - e) Management Practices to Enhance Habitat For Common and Endangered Wildlife Species
  
2. Understanding Wildlife Ecology
  - a) Predator-Prey Relationships
  - b) Adaptations
  - c) Population Dynamics
  - d) Carrying Capacity and Limiting Factors
  - e) Food Chains and Food Webs
  
3. Issues Involving Wildlife and Society
  - a) Endangered and Threatened Wildlife Species
  - b) Land Use and Habitat Loss, Including Wetlands
  - c) Introduced and Reintroduced Wildlife Species
  - d) Hunting and Trapping
  - e) Human Health
  - f) Maine Department of Inland Fisheries and Wildlife (MDIFW) and its Responsibilities
  - f) g) Maine Audubon and its Responsibilities
  - h) Current Issue

### WILDLIFE LEARNING OBJECTIVES

Envirothon students should have an understanding of the biology, ecology and habitat requirements of wildlife species in Maine. At a minimum, students should be familiar with the habitat types and associated wildlife species on the list

provided, as well as being familiar with Maine's endangered species. Students should be able to apply that knowledge to site specific situations. Interpretation of habitat information and evaluation of habitat quality in general, and in relation to specific wildlife species, are essential skills in wildlife management and conservation.

### **1. Relationships Between Habitat and Wildlife Species**

Envirothon students will be able to:

- identify common and endangered wildlife species from silhouettes, mounted specimens or pictures (keys may be used in some instances.)
- identify common and endangered wildlife species based on wildlife sign such as fur, hair, feathers, gnawings, rubbings, pellets, scat, and tracks (keys may be used in some instances.)
- answer questions concerning the natural history of common and endangered wildlife species.
- identify basic needs required by wildlife for survival.
- identify habitat requirements for common and endangered wildlife species.
- describe ways habitat can be improved for common and endangered wildlife species.
- evaluate a given habitat and identify the wildlife species most likely to live there.

### **2. Understanding of Wildlife Ecology**

Envirothon students will be able to:

- describe predator-prey relationships and be able to cite examples.
- describe specific adaptations of common and endangered wildlife species to their environment and their role in the ecosystem.
- describe factors that limit or enhance population growth.
- discuss concepts of carrying capacity and limiting factors.
- describe food chains and food webs and be able to cite examples.

### **3. Issues Involving Wildlife and Society**

Envirothon students will be able to:

- discuss the main causes of wildlife population declines that lead to a species being listed as threatened or endangered.
- discuss the effect of land use decisions on wildlife habitat.
- discuss the consequences of introducing or reintroducing wildlife species in terms of the species effect on habitat, other wildlife species and humans.
- discuss the function of hunting and trapping regulations.
- discuss major wildlife-related health issues such as Lyme disease and rabies.
- discuss the role of MDIFW and Maine Audubon in the protection, conservation and management of wildlife in Maine.

## REFERENCE MATERIALS FOR WILDLIFE

### Maine Audubon Resources

Please try to utilize materials available on WEB sites before contacting:

Linda Woodard, Director, Scarborough Marsh  
Audubon Center, Teacher, Programs and  
Seasonal Nature Exploration  
Maine Audubon  
20 Gilsland Farm Road  
Falmouth, Maine 04105  
(207) 781-2330  
(lwoodard@maineaudubon.org)

For additional resources check Maine Audubon Web Site:

*[www.maineaudubon.org](http://www.maineaudubon.org)*

Resources are continually posted on the site on resource management and conservation of wildlife and wildlife habitat including such things as endangered species, vernal pool protection and northern forest land conservation.

One page to specifically review is

<http://www.maineaudubon.org/consERVE/atrisk/plover/pplt.shtml>

### Other Maine Audubon Resources

The Teacher Resource Center at Gilsland Farm Audubon Center in Falmouth has over 1,900 resources on environmental education. It has curriculum materials, background books such as field guides, literature books, videos and animal mounts for local schools. These resources can be used free at Maine Audubon. If you want to take them out you must be a TRC member. The cost is \$40 for a school and \$20 for an individual. We ship all over the state. The resources are listed on our web site. For more information contact Linda Woodard.

For Maine Department of Inland Fisheries and Wildlife Resources send your inquiries to:

Lisa Kane, Natural Science Educator  
Department of Fish and Wildlife  
284 State Street, #41  
Augusta, Maine 04333  
(207) 287-3303

*Lisa.Kane@maine.gov*

**\*\*\* Suggestion: Take an Envirothon Team Field Trip to the Maine Wildlife Park in Gray for wildlife identification practice; a variety of Maine mammals, ground birds, raptors and turtles are on display, plus exhibits in the Visitors Center can aid your Envirothon teams in their wildlife identification expertise. Visit one of the many Maine Audubon Sanctuaries throughout the state for resources (call 781-2330 for more information), the Maine State Museum in Augusta and the L.C. Bates Museum in Skowhegan all have good collections of mounted specimens for your teams to study!! Please make an effort to utilize these resources!! \*\*\*\***

Please use the state Fish and Wildlife Web Site for lots of information:

***www.mefishwildlife.com***

**Please Read and Review these Resources:**

1. **2008 Wildlife Division Research and Management Annual Report (available on the IFW WEB SITE or hard copies from regional IFW offices)**
2. **January 2009 issue of Maine Fish and Wildlife magazine – available ONLINE @ mefishwildlife.com**
3. **Current Maine Endangered and Nongame wildlife information ONLINE**
4. **Maine Animal Tracks, 11 x 17 poster**
5. **Current Maine Hunting and Trapping Regulations summaries ONLINE**
6. **Maine's Endangered and Threatened Wildlife BOOK (check your school library for a copy or available from IFW Online Store for \$5.00)**
7. ***You Alone in the Woods, the Lost Hunter's Guide***
8. ***Eagle Feathers and Moose Antlers; Black Market Wildlife*; Maine Fish and Wildlife articles: the legalities, ins and outs; cans and cant's of possessing wildlife or wildlife parts**
9. ***What Kind of 'Vore' are you?"* (ME Fish and Wildlife article: guide to teeth patterns and diet of different kinds of wildlife)  
*PDF versions available upon request***
10. ***Critters of Maine*- a pocket guide (check your school library for a copy or available from IFW or Online Store for \$5.95).**
  11. **Amphibian, Snake and Turtle natural history posters- set of three available for \$8.00 from IFW Online store**
  12. **Birds of Maine Posters (set of three available for \$8.00 from IFW Online store)**
  13. **Safari in a Box: a trunk containing wildlife pelts, scat, skulls and activities available to borrow; check IFW website to learn more about it and how/where to borrow**
  14. **Fishes of Maine: free booklet from IFW**
  15. **Maine Mammal Poster: available for \$1.50 from IFW Online store**

16. **Maine Endangered Species Poster available for \$0.75 from IFW Online store**

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You should be able to check this out of the library: the classic book called: BIODIVERSITY by **E.O. Wilson**

<http://www.maine.gov/doc/nrimc/mnap/features/commsheets.htm>

***From this site study these three habitats to learn about the biodiversity within each.***

[Beech - Birch - Maple Forest](#)  
[Atlantic White Cedar Swamp](#)  
[Beach Strand](#)

Other sites that might be helpful:

<http://stateofthebirds.audubon.org/>

<http://www.birdlife.org/sowb/index.html>

<http://www.globalissues.org/issue/169/biodiversity>

<http://www.beginningwithhabitat.org/>