MERIT BADGE SERIES

BIRD STUDY

BOY SCOUTS OF AMERICA®

STEM-Based
BIRD STUDY

“Enhancing our youths’ competitive edge through merit badges”
Bird Study

1. Explain the need for bird study and why birds are useful indicators of the quality of the environment. Describe how birds are part of the ecosystem.

2. Show that you are familiar with the terms used to describe birds by sketching or tracing a perched bird and then labeling 15 different parts of the bird. Sketch or trace an extended wing and label six types of wing feathers.

3. Demonstrate that you know how to properly use and care for binoculars, a spotting scope, or a monocular.
   (a) Explain what the specification numbers mean on binoculars, a spotting scope, or a monocular.
   (b) Show how to adjust the eyepiece and how to focus for proper viewing.
   (c) Show how to properly care for and clean the lenses.
   (d) Describe when and where each type of viewing device would be most effective.

4. Demonstrate that you know how to use a bird field guide. Show your counselor that you are able to understand a range map by locating in the book and pointing out the wintering range, the breeding range, and/or the year-round range of one species of each of the following types of birds:
5. Observe and be able to identify at least 20 species of wild birds. Prepare a field notebook, making a separate entry for each species, and record the following information from your field observations and other references.

(a) Note the date and time.
(b) Note the location and habitat.
(c) Describe the bird’s main feeding habitat and list two types of food that the bird is likely to eat.
(d) Note whether the bird is a migrant or a summer, winter, or year-round resident of your area.

6. Describe to your counselor how certain orders of birds are uniquely adapted to a specific habitat. In your description, include characteristics such as the size and shape of the following:

(a) Beak
(b) Body
(c) Leg and foot
(d) Feathers/plumage

7. Explain the function of a bird’s song. Be able to identify five of the 20 species in your field notebook by song or call alone. For each of these five species, enter a description of the song or call, and note the behavior of the bird making the sound. Note why you think the bird was making the call or song that you heard.

8. Do ONE of the following:

(a) Go on a field trip with a local club or with others who are knowledgeable about birds in your area.
   (1) Keep a list or fill out a checklist of all the birds your group observed during the field trip.
   (2) Tell your counselor which birds your group saw and why some species were common and some were present in small numbers.
   (3) Tell your counselor what makes the area you visited good for finding birds.

(b) By using a public library, the internet, or contacting the National Audubon Society, find the name and location of the Christmas Bird Count nearest your home and obtain the results of a recent count.
(1) Explain what kinds of information are collected during the annual event.

(2) Tell your counselor which species are most common, and explain why these birds are abundant.

(3) Tell your counselor which species are uncommon, and explain why these were present in small numbers. If the number of birds of these species is decreasing, explain why, and what, if anything, could be done to reverse their decline.

9. Do ONE of the following. For the option you choose, describe what birds you hope to attract, and why.

(a) Build a bird feeder and put it in an appropriate place in your yard or another location.

(b) Build a birdbath and put it in an appropriate place.

(c) Build a backyard sanctuary for birds by planting trees and shrubs for food and cover.

10. Do the following:

(a) Explain the differences between extinct, endangered, and threatened.

(b) Identify a bird species that is on the endangered or threatened list. Explain what caused their decline. Discuss with your counselor what can be done to reverse this trend and what can be done to help remove the species from the endangered or threatened list.

11. Identify three career opportunities connected to the study of birds. Pick one and find out the education, training, and experience required for this profession. Discuss with your counselor if this profession might interest you.
Bird Study Resources

Scouting Literature

Eastern Backyard Birds pocket guide; Western Backyard Birds pocket guide; Fieldbook; Environmental Science, Fish and Wildlife Management, Forestry, Gardening, Landscape Architecture, Mammal Study, Nature, Pets, Photography, Reptile and Amphibian Study, Soil and Water Conservation, Sustainability, and Woodwork merit badge pamphlets

Visit the Boy Scouts of America’s official retail website at http://www.scoutstuff.org for a complete listing of all merit badge pamphlets and other helpful Scouting materials and supplies.

Field Guides


Other Books About Birds


Other Media

*Bird Brain 7.1 for Mac*. Ideaform. Listing and record-keeping software. Download.


*iBird Pro Guide to Birds*. App for iOS.

Male, Michael, and Judy Fieth. *Watching Sparrows*. 2010. 75 minutes. DVD.

———. *Watching Warblers*. 2003. 60 minutes. DVD.

———. *Watching Warblers West*. 2009. 60 minutes. DVD.

*National Geographic Birds: Field Guide to North America*. App for iOS.


Porter, Diane. *How to Start Watching Birds*. 2006. 79 minutes. DVD.


The Audubon Bird Guide App. iOS and Android.

The Sibley eGuide to Birds App. iOS and Android.


———. *Birding by Ear: Western*. 1999. Audio CD.

**Organizations and Websites**

**American Bird Conservancy**
Toll-free telephone: 888-247-3624
Website: http://www.abcbirds.org

**American Birding Association**
Toll-free telephone: 800-850-2473
Website: http://www.aba.org

**Cornell Laboratory of Ornithology**
Website: http://www.birds.cornell.edu

**eBird**
Website: http://ebird.org

**The Great Backyard Bird Count**
Website: http://www.birdsource.org

**Hawk Migration Association of North America**
Website: http://www.hmana.org

**Journey North**
Website: http://wwwlearner.org/jnorth

**National Audubon Society**
Toll-free telephone: 844-428-3826
Website: http://www.audubon.org

**North American Bluebird Society**
Telephone: 508-238-3087
Website: http://nabluebirdsociety.org

**Partners in Flight**
Website: http://www.partnersinflight.org

**Patuxent Wildlife Research Center**
U.S. Geological Survey
Toll-free telephone: 888-275-8747
Website: http://www.pwrc.usgs.gov

**Purple Martin Conservation Association**
Telephone: 814-833-7656
Website: http://www.purplemartin.org

**U.S. Fish and Wildlife Service**
Website: http://www.fws.gov