



Bird Study

Scouts BSA · Nature

Name

Started

Completed

Birds are everywhere, and once you start noticing them, you'll see and hear them all the time. This badge teaches you to identify birds by sight and sound and to help protect them. All you need is curiosity, a notebook, and some time outdoors.

Requirements

Every official requirement, in plain language. Check the official wording when you sign off (scouting.org/merit-badges/bird-study/). Tips and examples are ideas, not extra requirements.

- ☐ **1** Explain why we study birds, why they're good signs of how healthy the environment is, and how they fit into the ecosystem

Tip: Think about what changes in bird numbers might tell us about clean air, water, and healthy habitats.

Example: Explain how birds work like an early warning system: when bald eagles and peregrine falcons declined because of the pesticide DDT, it showed the chemical was building up in the food chain. When DDT was banned, both species recovered.

2 Bird anatomy terms

Tips for this section: Draw a bird from a photo and label its parts. Use the labels when you describe birds in your notes.

- ☐ **2a** Sketch or trace a perched bird and label 15 of its parts

- ☐ **2b** Sketch or trace an outstretched wing and label 6 kinds of wing feathers

3 Binoculars, scopes, and monoculars

Tips for this section: Practice focusing binoculars on a still object before trying moving birds. Keep the lenses capped when not in use.

- ☐ **3a** Explain what the specification numbers mean on your binoculars, spotting scope, or monocular

- ☐ **3b** Show how to adjust the eyepiece and focus for a clear view

- ☐ **3c** Show how to care for and clean the lenses correctly

- ☐ **3d** Describe when and where each kind of viewing device works best

- ☐ **4** Show you can use a bird field guide: find and point out to your counselor the range map's wintering, breeding, and/or year-round range for one species of each type below

Tip: Look up a bird you already know in a field guide and study its range map. Learn how the guide is organized.

- ☐ **4a** A seabird

- ☐ **4b** A plover

- ☐ **4c** A falcon or hawk

- ☐ **4d** A warbler or vireo

- ☐ **4e** A heron or egret

- ☐ **4f** A sparrow

- ☐ **5** Watch for and learn to identify 20 wild bird species, keeping a field notebook with a separate entry for each that records the details below from your observations and other sources

Tip: Start in your own yard or a local park. Write the date, place, and what you saw for each bird in your notebook.

Example: Each species gets its own entry. One might read: "Mallard. May 3, 7:15 a.m., city park pond, open water with grassy banks. Feeds mostly on the water by tipping up; probably eats water plants and insects. Lives here all year." Twenty species over a few weeks of outings adds up fast.

- ☐ **5a** Record the date and time

- ☐ **5b** Record the location and habitat

- ☐ **5c** Describe where the bird mainly feeds and list 2 foods it probably eats

- ☐ **5d** Record whether it migrates through or lives in your area in summer, in winter, or all year

- ☐ **6** Describe to your counselor how some orders of birds are specially adapted to their habitats, including the size and shape of the features below

Tip: Compare beaks, feet, and wings of different birds, like ducks and hawks, and how they fit where each bird lives.

Example: Compare two orders: ducks have webbed feet for paddling and flat bills for straining food from water, while hawks have hooked beaks for tearing and sharp talons for grabbing prey. Then add a third, like woodpeckers with stiff tails that prop them against trees.

- ☐ **6a** Beak

- ☐ **6b** Body

- ☐ **6c** Legs and feet

☐ **6d** Feathers and plumage

☐ **7** Explain why birds sing and how songs differ from calls; identify 5 of your 20 notebook species by sound alone, and for each, describe the sound, the bird's behavior, and why you think it made it

Tip: Listen early in the morning. Free bird sound apps and websites can help you match songs to species.

Example: Learn songs with memory phrases: the American robin sounds like "cheerily, cheer-up," the black-capped chickadee says its own name, and the barred owl asks "who cooks for you?" Listen at dawn for a week to pick out five.

8 **Birding with others: Choose 1 of 3**

Tips for this section: Local Audubon chapters and nature centers often run bird walks and counts that welcome beginners.

Example for this section: Go birding with a nature center or club and list everything the group spots, look up the results of your nearest Christmas Bird Count, or help at a bird-banding station run by a licensed bander. Note what was counted, how it was recorded, and where the data goes.

☐ **8a** Go birding with a local club or other people who know the birds in your area

☐ **8a1** Make a list, or complete a checklist, of every bird your group spotted

☐ **8a2** Tell your counselor what birds the group found and why some species were plentiful and others scarce

☐ **8a3** Tell your counselor why the area you visited is a good place to find birds

- ☐ **8b** Using a library, the internet, or the National Audubon Society, find the nearest Christmas Bird Count and get the results of a recent count

- ☐ **8b1** Explain what kinds of information the yearly count gathers

- ☐ **8b2** Tell your counselor which species were most common and why they're so plentiful

- ☐ **8b3** Tell your counselor which species were uncommon and why; if their numbers are dropping, explain why and what could be done to turn it around

- ☐ **8c** Help with a bird banding program run by an approved state or federal agency, a university researcher, a bird observatory, or a certified private bander

- ☐ **8c1** Explain who is allowed to band birds and why

- ☐ **8c2** Explain the reasons birds are banded

- ☐ **8c3** Explain which kinds of birds are banded

- ☐ **8c4** Tell how the birds were caught, how many species were recorded while you were there, and what you did in the program

9 Attract birds: Choose 1 of 5

Tips for this section: Pick a project you can keep up, and place it where you can watch birds visit from a window.

Example for this section: Build a simple nest box sized for a bird that lives near you, like a bluebird or wren. Mount it on a post with a predator guard, face the hole away from strong winds, and check it from a distance once a week.

- ☐ **9a** Build a bird feeder and set it in a good spot in your yard or elsewhere; describe which birds you hope to attract and why, and the upkeep it needs

- ☐ **9b** Build a birdbath and set it in a good spot; describe which birds you hope to attract and why, and the upkeep it needs

- ☐ **9c** Make a backyard bird sanctuary with trees and shrubs you plant to give birds food and shelter; describe which birds you hope to attract and why, and the upkeep it needs

- ☐ **9d** Build a nest box for a species you choose from counselor-approved plans; describe which birds you hope to attract and why, and the upkeep it needs

- ☐ **9e** Describe what a backyard bird habitat needs in a particular area and sketch a plan listing target birds and plants for food, cover, and nesting; explain your choices and the upkeep it needs

10 Endangered and declining birds

Tips for this section: Learn about one endangered bird and what people are doing to help it recover.

- ☐ **10a** Explain how extinct, endangered, and threatened differ

- ☐ **10b** Name an endangered or threatened bird, explain why it declined, and discuss with your counselor how to reverse the decline and help get it off the list

- ☐ **10c** Explain how to help declining birds before they become endangered or threatened: list ways to protect habitat, name threats migratory birds face, and tell how to protect their food supply

- ☐ **11** Name a non-native bird (brought to North America from another country since 1800) and describe how non-native birds can harm the ecosystem

Tip: Find out which non-native birds live near you and how they affect native birds.

Example: The European starling was brought to North America in the 1890s and now numbers in the millions. Explain how starlings compete with native cavity-nesters like bluebirds and woodpeckers for nest holes.

- ☐ **12** Discuss why Leave No Trace's Seven Principles and the Outdoor Code matter for bird study, and explain how you followed them in natural areas while observing, collecting, and identifying

Tip: Watch birds from a respectful distance and stay away from nests so you don't disturb them.

13 Careers and hobbies: Choose 1 of 2

Tips for this section: Ask a wildlife biologist, park naturalist, or longtime birder how they got started.

- ☐ **13a** Name 3 careers that use bird study; research one's training, education, certification, experience, costs, job outlook, starting pay, and advancement, and discuss with your counselor whether it interests you

- ☐ **13b** Find how bird study could become a hobby for you; research extra training, costs, and helpful organizations, then discuss with your counselor and share your short- and long-term goals for it