



# BIRD STUDY

## Merit Badge Requirements

- 1) Explain the need for bird study and why birds are useful indicators of the quality of the environment.
- 2) Show that you are familiar with the terms used to describe 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) Explain what the specification numbers on the binoculars mean.
  - 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.
- 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:  
A) Seabird B) Plover C) Falcon D) Warbler or vireo E) Heron or egret F) Sparrow G) Nonnative bird\*  
*(\*Nonnative bird - introduced to North America from a foreign country since 1800)*
- 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) 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.
- 7) 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 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.
- 8) 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.

## Requirement 1

Explain the need for bird study: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

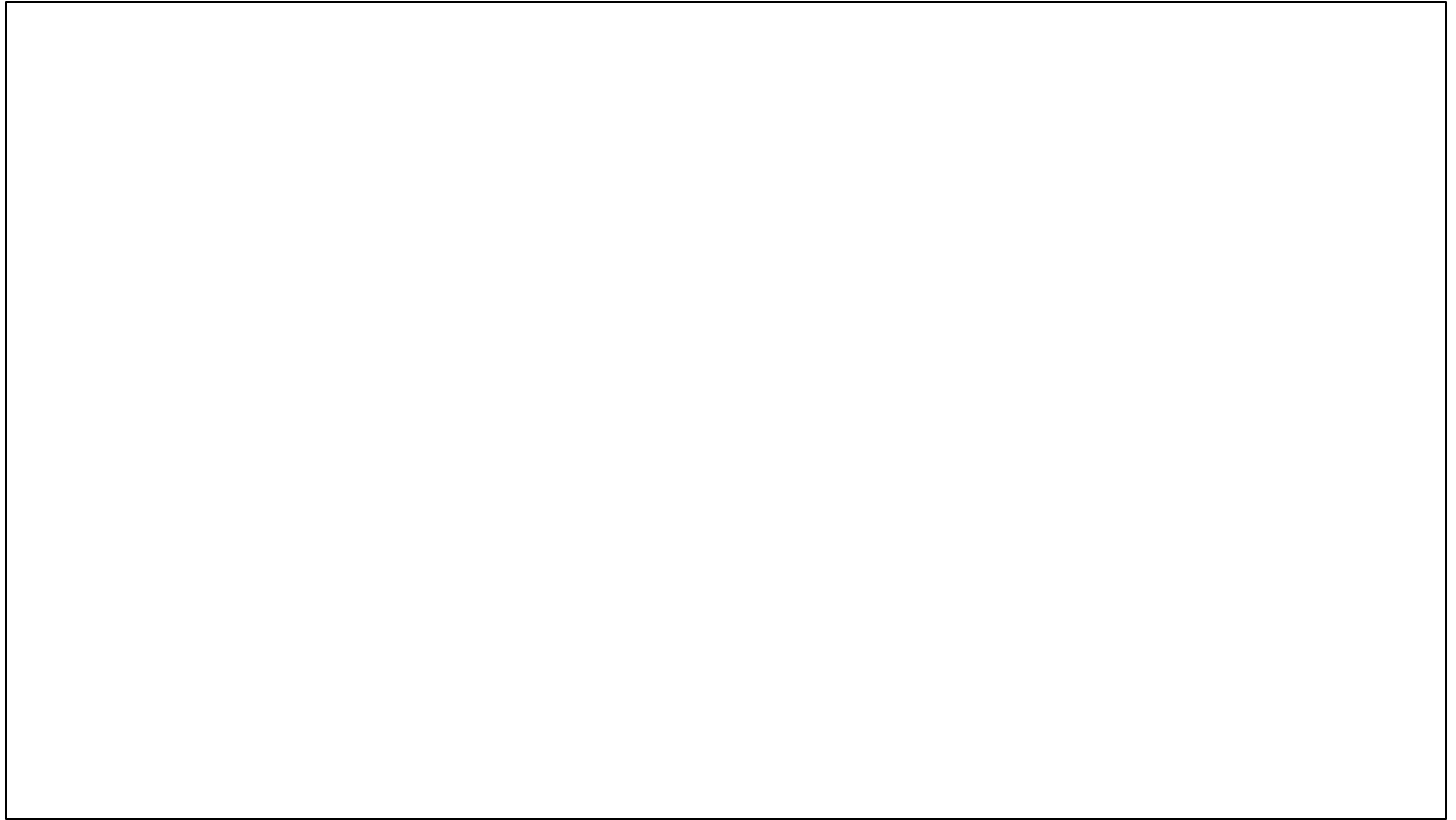
Why are birds useful indicators of the quality of the environment? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Requirement 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 the types of wing feathers:



### **Requirement 3**

Describe the proper use and care for binoculars: \_\_\_\_\_

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Tell what the specification numbers on the binoculars mean? \_\_\_\_\_

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\_\_ Demonstrate for your counselor the correct way to adjust the eyepiece and how to focus binoculars for proper viewing.

Describe how to properly care and clean the lenses of binoculars: \_\_\_\_\_

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## Requirement 4

Demonstrate that you know how to use a bird field guide. Give a brief description and a few tips on using the guide: \_\_\_\_\_

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\_\_ 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. Name the species. Place a check next to each range name after you have properly identified each range on your map.

Seabird Species: \_\_\_\_\_      \_\_ Wintering Range    \_\_ Breeding Range    \_\_ Year-round Range

Plover Species: \_\_\_\_\_      \_\_ Wintering Range    \_\_ Breeding Range    \_\_ Year-round Range

Falcon Species: \_\_\_\_\_      \_\_ Wintering Range    \_\_ Breeding Range    \_\_ Year-round Range

Warbler or Vireo Species: \_\_\_\_\_      \_\_ Wintering Range    \_\_ Breeding Range    \_\_ Year-round Range

Heron or Egret Species: \_\_\_\_\_      \_\_ Wintering Range    \_\_ Breeding Range    \_\_ Year-round Range

Sparrow Species: \_\_\_\_\_      \_\_ Wintering Range    \_\_ Breeding Range    \_\_ Year-round Range

Nonnative Species: \_\_\_\_\_      \_\_ Wintering Range    \_\_ Breeding Range    \_\_ Year-round Range

## Requirement 5

For this requirement you are asked to observe and be able to identify at least 20 species of wild birds. You need to prepare a field notebook and make an entry for each bird you identify. You may use the following layout as your field notebook or you may choose to create a notebook on your own. Record all the information specified for this requirement.

**Bird Name:** \_\_\_\_\_      **Date:** \_\_\_\_\_      **Time:** \_\_\_\_\_

**Location:** \_\_\_\_\_

**Habitat:** \_\_\_\_\_

**Birds Main Feeding Habitat:** \_\_\_\_\_

**Two Types Of Food The Bird Is Likely To Eat:**      **Food:** \_\_\_\_\_      **Food:** \_\_\_\_\_

Bird is (circle one): *Migrant Resident* - *Summer Resident* - *Winter Resident* - *Year-round Resident* to your area.

**Bird Name:** \_\_\_\_\_      **Date:** \_\_\_\_\_      **Time:** \_\_\_\_\_

**Location:** \_\_\_\_\_

**Habitat:** \_\_\_\_\_

**Birds Main Feeding Habitat:** \_\_\_\_\_

**Two Types Of Food The Bird Is Likely To Eat:**      **Food:** \_\_\_\_\_      **Food:** \_\_\_\_\_

Bird is (circle one): *Migrant Resident* - *Summer Resident* - *Winter Resident* - *Year-round Resident* to your area.

**Bird Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_

Location: \_\_\_\_\_

Habitat: \_\_\_\_\_

Birds Main Feeding Habitat: \_\_\_\_\_

Two Types Of Food The Bird Is Likely To Eat: Food: \_\_\_\_\_ Food: \_\_\_\_\_

Bird is (circle one): *Migrant Resident* - *Summer Resident* - *Winter Resident* - *Year-round Resident* to your area.

**Bird Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_

Location: \_\_\_\_\_

Habitat: \_\_\_\_\_

Birds Main Feeding Habitat: \_\_\_\_\_

Two Types Of Food The Bird Is Likely To Eat: Food: \_\_\_\_\_ Food: \_\_\_\_\_

Bird is (circle one): *Migrant Resident* - *Summer Resident* - *Winter Resident* - *Year-round Resident* to your area.

**Bird Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_

Location: \_\_\_\_\_

Habitat: \_\_\_\_\_

Birds Main Feeding Habitat: \_\_\_\_\_

Two Types Of Food The Bird Is Likely To Eat: Food: \_\_\_\_\_ Food: \_\_\_\_\_

Bird is (circle one): *Migrant Resident* - *Summer Resident* - *Winter Resident* - *Year-round Resident* to your area.

**Bird Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_

Location: \_\_\_\_\_

Habitat: \_\_\_\_\_

Birds Main Feeding Habitat: \_\_\_\_\_

Two Types Of Food The Bird Is Likely To Eat: Food: \_\_\_\_\_ Food: \_\_\_\_\_

Bird is (circle one): *Migrant Resident* - *Summer Resident* - *Winter Resident* - *Year-round Resident* to your area.

**Bird Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_

Location: \_\_\_\_\_

Habitat: \_\_\_\_\_

Birds Main Feeding Habitat: \_\_\_\_\_

Two Types Of Food The Bird Is Likely To Eat: Food: \_\_\_\_\_ Food: \_\_\_\_\_

Bird is (circle one): *Migrant Resident* - *Summer Resident* - *Winter Resident* - *Year-round Resident* to your area.

**Bird Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_

Location: \_\_\_\_\_

Habitat: \_\_\_\_\_

Birds Main Feeding Habitat: \_\_\_\_\_

Two Types Of Food The Bird Is Likely To Eat: Food: \_\_\_\_\_ Food: \_\_\_\_\_

Bird is (circle one): *Migrant Resident* - *Summer Resident* - *Winter Resident* - *Year-round Resident* to your area.

**Bird Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_

Location: \_\_\_\_\_

Habitat: \_\_\_\_\_

Birds Main Feeding Habitat: \_\_\_\_\_

Two Types Of Food The Bird Is Likely To Eat: Food: \_\_\_\_\_ Food: \_\_\_\_\_

Bird is (circle one): *Migrant Resident* - *Summer Resident* - *Winter Resident* - *Year-round Resident* to your area.

**Bird Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_

Location: \_\_\_\_\_

Habitat: \_\_\_\_\_

Birds Main Feeding Habitat: \_\_\_\_\_

Two Types Of Food The Bird Is Likely To Eat: Food: \_\_\_\_\_ Food: \_\_\_\_\_

Bird is (circle one): *Migrant Resident* - *Summer Resident* - *Winter Resident* - *Year-round Resident* to your area.

**Bird Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_

Location: \_\_\_\_\_

Habitat: \_\_\_\_\_

Birds Main Feeding Habitat: \_\_\_\_\_

Two Types Of Food The Bird Is Likely To Eat: Food: \_\_\_\_\_ Food: \_\_\_\_\_

Bird is (circle one): *Migrant Resident* - *Summer Resident* - *Winter Resident* - *Year-round Resident* to your area.

**Bird Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_

Location: \_\_\_\_\_

Habitat: \_\_\_\_\_

Birds Main Feeding Habitat: \_\_\_\_\_

Two Types Of Food The Bird Is Likely To Eat: Food: \_\_\_\_\_ Food: \_\_\_\_\_

Bird is (circle one): *Migrant Resident* - *Summer Resident* - *Winter Resident* - *Year-round Resident* to your area.

**Bird Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_

Location: \_\_\_\_\_

Habitat: \_\_\_\_\_

Birds Main Feeding Habitat: \_\_\_\_\_

Two Types Of Food The Bird Is Likely To Eat: Food: \_\_\_\_\_ Food: \_\_\_\_\_

Bird is (circle one): *Migrant Resident* - *Summer Resident* - *Winter Resident* - *Year-round Resident* to your area.

**Bird Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_

Location: \_\_\_\_\_

Habitat: \_\_\_\_\_

Birds Main Feeding Habitat: \_\_\_\_\_

Two Types Of Food The Bird Is Likely To Eat: Food: \_\_\_\_\_ Food: \_\_\_\_\_

Bird is (circle one): *Migrant Resident* - *Summer Resident* - *Winter Resident* - *Year-round Resident* to your area.

**Bird Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_

Location: \_\_\_\_\_

Habitat: \_\_\_\_\_

Birds Main Feeding Habitat: \_\_\_\_\_

Two Types Of Food The Bird Is Likely To Eat: Food: \_\_\_\_\_ Food: \_\_\_\_\_

Bird is (circle one): *Migrant Resident* - *Summer Resident* - *Winter Resident* - *Year-round Resident* to your area.

**Bird Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_

Location: \_\_\_\_\_

Habitat: \_\_\_\_\_

Birds Main Feeding Habitat: \_\_\_\_\_

Two Types Of Food The Bird Is Likely To Eat: Food: \_\_\_\_\_ Food: \_\_\_\_\_

Bird is (circle one): *Migrant Resident* - *Summer Resident* - *Winter Resident* - *Year-round Resident* to your area.

**Bird Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_

Location: \_\_\_\_\_

Habitat: \_\_\_\_\_

Birds Main Feeding Habitat: \_\_\_\_\_

Two Types Of Food The Bird Is Likely To Eat: Food: \_\_\_\_\_ Food: \_\_\_\_\_

Bird is (circle one): *Migrant Resident* - *Summer Resident* - *Winter Resident* - *Year-round Resident* to your area.

**Bird Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_

Location: \_\_\_\_\_

Habitat: \_\_\_\_\_

Birds Main Feeding Habitat: \_\_\_\_\_

Two Types Of Food The Bird Is Likely To Eat: Food: \_\_\_\_\_ Food: \_\_\_\_\_

Bird is (circle one): *Migrant Resident* - *Summer Resident* - *Winter Resident* - *Year-round Resident* to your area.

**Bird Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_

Location: \_\_\_\_\_

Habitat: \_\_\_\_\_

Birds Main Feeding Habitat: \_\_\_\_\_

Two Types Of Food The Bird Is Likely To Eat: Food: \_\_\_\_\_ Food: \_\_\_\_\_

Bird is (circle one): *Migrant Resident* - *Summer Resident* - *Winter Resident* - *Year-round Resident* to your area.

**Bird Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_

Location: \_\_\_\_\_

Habitat: \_\_\_\_\_

Birds Main Feeding Habitat: \_\_\_\_\_

Two Types Of Food The Bird Is Likely To Eat: Food: \_\_\_\_\_ Food: \_\_\_\_\_

Bird is (circle one): *Migrant Resident* - *Summer Resident* - *Winter Resident* - *Year-round Resident* to your area.

## Requirement 6

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.

**Bird Name:** \_\_\_\_\_

Description of Song or Call: \_\_\_\_\_

\_\_\_\_\_

Behavior of Bird Making the Sound: \_\_\_\_\_

\_\_\_\_\_

Why do you think this bird was making the call or sound you heard? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Bird Name:** \_\_\_\_\_

Description of Song or Call: \_\_\_\_\_  
\_\_\_\_\_

Behavior of Bird Making the Sound: \_\_\_\_\_  
\_\_\_\_\_

Why do you think this bird was making the call or sound you heard? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Bird Name:** \_\_\_\_\_

Description of Song or Call: \_\_\_\_\_  
\_\_\_\_\_

Behavior of Bird Making the Sound: \_\_\_\_\_  
\_\_\_\_\_

Why do you think this bird was making the call or sound you heard? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Bird Name:** \_\_\_\_\_

Description of Song or Call: \_\_\_\_\_  
\_\_\_\_\_

Behavior of Bird Making the Sound: \_\_\_\_\_  
\_\_\_\_\_

Why do you think this bird was making the call or sound you heard? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Bird Name:** \_\_\_\_\_

Description of Song or Call: \_\_\_\_\_  
\_\_\_\_\_

Behavior of Bird Making the Sound: \_\_\_\_\_  
\_\_\_\_\_

Why do you think this bird was making the call or sound you heard? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



If you selected *Option B*:

By using a public library or contacting the National Audubon Society, find the name and location of the Christmas Bird Count nearest your home.

What were the results of the most recent count? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

What kinds of information are collected during the annual event? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Which species are most common? \_\_\_\_\_

Why are these birds abundant? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Which species are uncommon? \_\_\_\_\_

Why are these birds present in small numbers? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

If the number of birds of this species is decreasing, explain why? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

What, if anything, can be done to reverse their decline? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Requirement 8

You have been given three options for this requirement. Select and complete one of them.

If you selected *Option A*:

Build a bird feeder and put it in an appropriate place in your yard or another location. Describe the bird feeder and the location you selected: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

What kinds of birds do you hope to attract with your bird feeder: \_\_\_\_\_

\_\_\_\_\_

Why? \_\_\_\_\_

\_\_\_\_\_

If you selected **Option B**:

Build a birdbath and put it in an appropriate place. Describe the birdbath you built and the location you selected for it: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

What kinds of birds do you hope to attract with your birdbath? \_\_\_\_\_

\_\_\_\_\_

Why? \_\_\_\_\_

\_\_\_\_\_

If you selected **Option C**:

Build a backyard sanctuary for birds by planting trees and shrubs for food and cover. Give a brief description of the sanctuary you built: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

What kinds of birds do you hope to attract with your backyard sanctuary? \_\_\_\_\_

\_\_\_\_\_

Why? \_\_\_\_\_

\_\_\_\_\_