

UCOR 1800 Hartley  
Taking Flight: Avian Biology  
Spring 2023

## Local Bird Guide Assignment

### Overview

Each student is required to make their own local bird guide covering eight bird species they observe during lab sessions on campus or on a neighborhood bird walk. Every other week students will spend 45 min outdoors looking at birds. See pages 3-4 of this document for birdwatching instructions. The local bird guide will have one page per bird and include the information listed below. Students will choose their own way to organize and display the information on each page, and they will add both an attractive cover and a concluding reflection to their booklet.

### Purpose: Skills and Knowledge

The purpose of this assignment is to help you practice the following skills that are useful in many different academic fields and life endeavors:

- Careful observations of the natural world
- Clear writing of detailed notes
- Sketching shapes accurately
- Composing meaningful questions
- Reflection and writing about learning experiences
- Visual and auditory recognition of different bird species

This assignment will reinforce the following important content knowledge in avian biology:

- Names and classification of 8 local bird species
- Anatomical features of birds such as feathers, beaks, wings, and feet
- Behaviors of wild birds
- Sizes, shapes, and colors that are used to identify birds
- Recognition of avian habitats

### Task

1. Before setting out on the campus bird walk with your lab group, record basic information about the date, time and weather.
2. While on the bird walk, make a list of all the birds you see. Pick 2-4 birds that you find interesting and study them closely. Birds we are likely to see include Anna's Hummingbird, American Crow, Black-capped Chickadee, European Starling, American Robin, Song Sparrow, Bushtit, House Finch, Dark-eyed Junco, Mallard, and Rock Pigeon. Others are possible, too.
3. Upon returning to Sinegal, record the behaviors and specific locations where you saw each focal bird.
4. Read the descriptions about the bird species in your AMNH field guide and the [allaboutbirds.org/guide](http://allaboutbirds.org/guide) and [audubon.org/bird-guide](http://audubon.org/bird-guide) websites. Study the images.

5. Plan the layout of your personalized bird guides pages, picking suitable placements of the illustration and required information (see below). Use non-lined paper (8.5"x11" preferred) and write on one side only.
6. Fill in the sections of each page neatly. Subheadings are recommended. Aim for accuracy in the body shape and proportions and coloration of each bird drawing. Two pages will be completed every 2 weeks (see the lab schedule in the Syllabus).
7. As the quarter proceeds, keep notes on the specific challenges and benefits you encounter while birdwatching and when completing the bird guide pages, so you can incorporate those observations into the final reflection page, which is due near the end of the quarter.
8. As you are preparing your final two bird pages, compose your reflection paper, which should be one page with 1.5x line spacing, 1" margins, and 12-point font. Discuss what you learned from birdwatching on campus and also what you learned from making the bird guide. Be sure to include specific examples and key moments as you compose your reflection.
9. Before turning in the final bird pages and reflection, make an attractive cover page that will entice readers to open your guide to learn about Seattle birds.

### Required Information

Use this checklist to make sure every page is complete.

1. Bird's common name, scientific name in the proper format, Family, and Order.
2. Date, time, and weather when the bird was observed. Give the approximate temperature and report conditions of sun, clouds, rain, or wind.
3. Location within the city (name of campus, park, or neighborhood) plus city and state, and specific spot relative to a particular building, intersection, or local landmark. Note the habitat where the bird was situated in terms of height (ground, shrub, tree, or sky), vegetation or surface type (e.g., wood chips, grass, rhododendron, pine tree), and surrounding area (such as lawn or thicket).
4. Describe the bird's appearance in terms of overall size (give metric values for length, wingspan, and weight from the field guide), and shapes and colors of head, body, tail, wings, beak, and feet. **Include your own color illustration.**
5. Write a couple of sentences indicating the bird's behaviors, such as locomotion, foraging, vocalization, or social interactions, that you observed.
6. After reading the species description in the field guide, considering the various topics covered in class, and thinking about your direct observations of the bird(s), write two questions about the individual or species that demonstrate your engaged curiosity. Give some context for each question.

### Criteria for Success

Bird guides will be scored based on the accuracy of information, completeness of observations, clarity of presentation, and depth of thinking.

### Timeline and Point Allocation

April 20	Turn in first 2 completed bird pages	10 pts.
May 4	Turn in second 2 completed bird pages	10 pts.
May 18	Turn in next 2 completed bird pages	10 pts.
June 1	Turn in last 2 bird pages plus booklet cover + reflection page	20 pts.

---

## **Observing Wild Birds**

### Going outdoors

We will go outside as a group and look for birds during the times listed on the Lab Schedule. You will then have 1-2 weeks to develop each pair of bird guide pages (due dates above).

Some of you may be very comfortable traveling by foot through the campus gardens and others may be wary. Upbringing, personal identity, specific location/environment, and other factors will influence one's comfort level outdoors in the neighborhood – see the book review of Dr. Drew Lanham's memoir on CANVAS. Wear stable, comfortable shoes and dress appropriately for the weather. Three 45 min birdwatching sessions are planned for our class this quarter and some students will choose to explore a city park with Seattle non-Audubon to see additional birds for their "Learning in the Outdoors" assignment.

Walk slowly and quietly to avoid scaring the animals and stop frequently to study behaviors (i.e., what are the birds doing?). The American Birding Association publishes a Code of Birding Ethics, which states that birders should "keep well back from nests, roosts, and feeding sites," "exercise restraint and caution during observations," "stay on roads and trails," and "practice common courtesy in contacts with other people." Please be a responsible birder!

### Birding skills and phone app

Recognizing local bird species is a challenging yet rewarding skill to develop. "Birders" feel they benefit both physically and mentally from time spent outdoors in natural areas. Focusing on birds and studying their behaviors and features can reduce stress and improve one's vision and hearing as well. In this course students will be required to learn to recognize a minimum of 8 local species and they are encouraged to learn additional species here and elsewhere throughout their entire lives.

While some birds are large in size, have distinctive colors, and spend a lot of time in plain view, others are much harder to see. By paying attention to habitat, behaviors, and vocal traits, in addition to appearance, one has a better chance of identifying a bird. The Cornell Lab of Ornithology's **Merlin Bird ID app** is very helpful as you try to figure out which birds you are hearing and seeing when you are walking around on your own. Choose the "Bird Pack" corresponding to the US West Coast.

## Binoculars

Without binoculars one is often limited to studying the birds that are more easily seen, such as those foraging on the ground, the larger ones, and the birds that are not perturbed by humans. Binoculars allow us to zoom in for a close-up look at birds in nature. These magnification devices are the primary tool of birdwatchers. Using binoculars takes practice so don't be discouraged if you have trouble at the start. Locating a particular branch and spotting the bird perched there gets easier with time. Here are some tips for binocular use:

**CAUTION: NEVER POINT YOUR BINOCULARS AT THE SUN**

1. If you are not wearing glasses leave the rim sticking out around the eyepieces but if you do wear glasses, roll back the rim.
2. To get good focus through both eyepieces, look through one eye (the side without the ocular adjustment) and use the main focus knob to get a particular distant object clear. Then switch to the other eye and adjust the eyepiece focus to get the second eye's view clear. Adjust the distance between the two eyepieces to match your face.
3. Get a visual spot on the bird with your bare eyes first and notice any useful features in the nearby landscape, such as a branch with yellow leaves, that will help you get your bearings.
4. Try to keep staring at the bird while you move the binoculars into viewing position. Search a bit as needed to see the bird and adjust the focus knob.
5. If you are birding with others let them know what you've spotted and explain the landscape features including details that will help them see the bird. People often describe the bird's perch in a particular tree relative to the numbers on a clock (e.g., bird in tallest evergreen tree about 10 feet down from top on branch at 2 o'clock) to share their views.
6. At the end of each birding session, please clean the eyepiece lenses and plastic ring around the eyepieces as instructed. Replace the end caps, wrap the neckstrap around the binocs carefully, and put them back in the case.