



# Birds Post-visit

## Classroom Activity

### Brief Synopsis

*Students will choose a native Minnesota bird to research. They will use library and computer resources to create a report and map display about their bird and its range and migration patterns. As a result of this research, the class may decide to take things further and help increase the quality of the habitat at their school and help contribute to a national study about feeder birds through Cornell University's Project Feeder Watch. They may be done through bird feeders, brush piles, bird houses, and landscaping.*

**Ages:** Designed for 5th–8th grade

**Time Considerations:** 10-15 minutes of class time (much longer for homework or research time)

#### Materials:

- Research Project worksheet
- Pencils

(Note: students may need to provide other materials dependent on teacher's choices for project expectations)

#### Vocabulary:

Ecosystem, Flyway, Food Chains, Habitat, Migration, Range, Thermal

#### Outcomes:

1. Students will locate and use information in reference materials.
2. Students will create informative writing.
3. Students will engage in a writing process, with attention to organization, focus, quality of ideas and a purpose.
4. Students will understand that communication is essential to science.
5. Students will know that biological populations change over time.

#### Minnesota Academic Standards:

**Science:** 5.I.A.1&2, 5.IV.E, 7.IV.B.2&3

**Language Arts:** Nearly all Writing (II) standards and benchmarks for 5th-8th grade.

**Social Studies:** 4-8.V.B.1, 4-8.V.D.1, 4-8.V.E.1

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### Set-up:

One of the best ways to make sure birds in your area will continue to have the habitat they need in order to survive, is to have people learn about a bird and begin to have a special interest in it and its well being.

### Activity 1: Minnesota Birds

**Background:** Many people enjoy seeing birds at their feeders. Some of these birds live in Minnesota all year long, others migrate spending only half of the year, or less in Minnesota. These migrating birds, not only may enjoy stopping in your backyard, but need to stop in all kinds of places along their migration route. It is estimated that half of birds migrating south for the winter will not make it back to breed in the spring. Predation, bad weather, and running into buildings are all problems for migrating birds, but loss of habitat (food and shelter) is the most damaging. Fortunately we humans can make a difference.

### Procedures:

1. Have your students choose a bird from the following list, or any list of birds native to Minnesota.

#### Common Feeder Birds

- American Goldfinch
- Black-capped Chickadee
- Blue Jay
- Downy Woodpecker
- Hairy Woodpecker
- Northern Cardinal
- Red-breasted Nuthatch
- Red-bellied Woodpecker
- Tufted Titmouse
- White-breasted Nuthatch

#### Common Migratory Feeder Birds

- Dark-eyed Junco
- Evening Grosbeak
- Indigo Bunting
- Northern Oriole
- Purple Finch
- Rose-breasted Grosbeak
- Song Sparrow

#### Common Migratory Birds

- American Robin
- Barn Swallow
- Cedar Waxwing
- Chipping Sparrow
- Cliff Swallow
- Eastern Bluebird
- Eastern Phoebe
- House Wren
- Purple Martin
- Red-eyed Vireo
- Red-winged Blackbird
- Ruby-throated Hummingbird
- Rufous-sided Towhee
- Scarlet Tanager
- Tree Swallow
- Yellow Warbler



2. Have your students research their chosen bird enough to write a report about its habitat needs, its habits, its role in food chains/ecosystems, and its migration pattern. Included is a worksheet designed to help your students develop their mapping project and bird report. \*\*\*If you want your students to create a map along with their report illustrating the migration pattern and route, make sure you use birds from the second two categories. The first category of birds in the list below do not migrate.
3. Use the list of expected information on this worksheet to help assess your students' work.
  - Did they complete all expected elements?
  - Is their map drawn clearly and key concise and logical?
  - Was creativity involved?
  - Did the student use good sentence structure and vocabulary to write their report?
  - Was other relevant information included in the report?
  - Were all references cited?

### Activity 2: Project Feeder Watch

**Background:** If you already have a feeder area at your school, you may want to become a part of Cornell University's *Project FeederWatch*. This program uses volunteers from around the country to keep a winter-long study of common feeder birds and the changes of their numbers and distributions over long periods of time.

There is a small annual fee for participating in this program. However, you will receive a quarterly newsletter, called *Birdscope* and a research kit to help you and your students learn about the birds you are studying. The research kit includes instructions, a bird identification poster, a wall calendar, a resource guide to bird feeding, and the data forms you will need to fill out as part of *Project FeederWatch*.

The data collected by your students will be uploaded via the internet, giving your students direct experience with data collection, recording and entry. This is a nation-wide program that regularly publishes its findings in scientific journals.

Log on to their website for more information:

<http://www.birds.cornell.edu/pfw/Overview/whatispfw.htm>

### Teacher Tips

- This project can be as simple or involved as you would like it to be. Feel free to adapt it to your needs.
- If your school allows, find library or hallway space to display your students' reports and maps, so each of your students can help educate the entire school.
- You can also use the displays to help teach the rest of your class. Give your students time to read through each display and include some basic information on a test to complete a unit about birds in Minnesota.



### Additional Resources

<http://www.birdnature.com/flyways.html>

Basic introduction to migration in North America and the major flyways.

<http://www.backyardnature.net/birdmgrt.htm>

Gives four categories of bird types based on where they nest and where they spend the winter.

[http://www.disknet.com/indiana\\_biolab/bird700.htm](http://www.disknet.com/indiana_biolab/bird700.htm)

This website has lots of links about bird migration. May be a good place for your students to gather information for their projects.

[http://www.pueblo.gsa.gov/cic\\_text/misc/forbirds/forbird.htm](http://www.pueblo.gsa.gov/cic_text/misc/forbirds/forbird.htm)

U.S. Fish and Wildlife Service web page with LOTS of information about feeding, watching, housing and landscaping for birds.



# Minnesota Bird Research

Name: \_\_\_\_\_ Due Date: \_\_\_\_\_

Bird's Common Name: \_\_\_\_\_

## My report will include:

1. The bird's common and scientific name.
2. The general description of what the bird looks like.
3. The bird's food preferences.
4. The bird's role in its ecosystem.  
(i.e. it pollinates flowers, it spreads seeds, it is an insect predator, etc.)
5. One problem my bird species faces today.
6. A list of all references used for this project.

## My Map will include:

1. A title, including the bird's common name and scientific name.
2. The bird's habitat range.
3. The bird's migration pattern (if applicable).
4. A key that explains the color code of the map.

