



HEADWATERS SCIENCE INSTITUTE

Winter Break Backyard Bird Challenge

Welcome to Day 1 of the Headwaters Science Institute Winter Break Backyard Bird Challenge! By now, you should have designed your bird feeder and placed it outside to attract birds in your local area. If you have not done so, you can participate by using our [Pre Lesson Activity](#).

There are over 2,000 species of birds in North America. Each region has unique bird populations. Over the course of the week, you will design and collect data on a question you have about the birds in your own backyard. To begin, pin your location on our [Backyard Bird Challenge map](#). All you have to do is click the + sign at the top of the page and enter your city, state. We will collect data to share as a group of community scientists.

Over the course of the week you will learn different ways scientists study birds. To start your project, view the [Bird Feeder Project](#) video. This video will guide you through the scientific method and help you decide your research question.

Use our [Science Journal](#) to keep track of your research.

1. What is your research question? Remember to test one variable at a time. A variable is anything that is changed or can be changed.
2. What materials will you need?
3. What is your hypothesis? A hypothesis is the expected answer to your question and should be testable.
4. [The Cornell Lab](#) has some great tips for collecting your data. You can submit your data to their website as well.

Each day you will need to collect data. The time of day is important when studying bird populations, select a time that is convenient for you. Try to complete your observations around the same time each day. When are birds most active? As you know, birds can fly away quickly. Take pictures of the birds that visit your bird feeder so that you can take your time identifying them. You can use [Bird Identification](#) to help you identify the species that visit your feeder. Collect your data in your science journal and share it with us using the [Backyard Bird Challenge Data Submission Form](#). Click submit another response to document more than 5 observations. As a bonus, you can add sketches of your birds to your journal. Share them with us at jenn@headwatersscienceinstitute.org.