

# Building Homes for our Feathered Friends

## Action Project Lesson Plan

### Purpose

To increase nesting sites for birds in your schoolyard while educating students on factors impacting local bird species.

### Overview

In small groups, your students will research local bird species and build bird boxes to provide nesting sites in your schoolyard. Students can decorate the bird boxes and educate other grades about the project.

### Getting Organized

**Level:** Grade 6

**Curriculum Connections:**

Science & Technology- Biodiversity  
Art- Visual Arts

**Length:** One to two hours

**Materials:**

- Eco Adventure Guides (Action Project planning pages 20-22)*
- Bird Identification Field Guides
- Hammers, nails, gloves, eye protection
- Drill and screws (for teacher use)
- Predator guard
- Bird box plans for each group
- Wood cut to size for each group
- Art supplies

### Teacher Background

Many of our local bird populations are declining due to loss of habitat and nesting sites from increased human development. In order to support these species, we can create safe nesting sites for birds in our schoolyard and community.

There are several factors that we must consider when designing and installing nest boxes. The habitat that you have surrounding your school will determine the species that are likely to use the nest box. Also, the nest box design must suit the habitat type. The placement of the nest box within the site and habitat is critical for it to attract the intended species. Improper placement can result in use by aggressive or invasive species. Nest boxes in the wrong places can also become targets for predators, who can destroy nests and sometimes adults.

Maintenance and monitoring are also important components of this project. Boxes that are in poor repair can harm birds directly by injury or entrapment and indirectly by reducing or eliminating their nesting success. Regular monitoring helps determine if boxes are a good idea at a particular site. Students can also take part in citizen science by monitoring the nests, collecting data and reporting it to The Cornell Lab of Ornithology at [www.nestwatch.org](http://www.nestwatch.org).

Bird boxes are an excellent tool to improve habitat, educate children and the public, and promote bird and habitat conservation, but must be properly managed to ensure they remain a benefit.

# Activity

1. Take your class outside to monitor and identify any bird species found in your schoolyard. This will help determine the best type of nesting box to build for your area. Alternately, your class can research common bird species in your area to see if there are any species that have declining populations.
2. Once the bird species of interest has been chosen, students should then research the type of nesting box required, the best location for the nest box, and any other factors that would impact the success of the nest box. The Cornell Lab of Ornithology is a great resource for nest box designs, <http://nestwatch.org>.
3. Once the nest box design has been chosen, teachers can purchase the proper lumber. Most retailers will cut the wood to the required length once you tell them what the project is for. There should be enough materials for each group to build their own nest box.
4. In their groups, students can nail together the nesting boxes while following the plans. Pre-drilling holes for the nails will help students. Once completed, teachers can reinforce the sides by putting in screws with a drill.
5. Students can decorate the exterior of the box with images of the species they are trying to attract. Classes can partner with younger grades to help decorate the nesting boxes and use this opportunity to educate other classes on the purpose of the nesting box.
6. Nesting boxes should be installed following recommendations for individual species. Ensure that you are following the height and distance requirements outlined on the nesting box plan. Create and install predator guards as needed.
7. Nesting boxes need to be maintained and monitored to ensure they are effective. Yearly maintenance is best completed in March, but can be done through fall and winter. Maintenance includes removing old nesting material, repairing damage and clearing out any unwanted tenants.
8. Have students monitor the nesting sites and record their findings. The Cornell Lab of Ornithology has an online certification program that students can complete to become a certified NestWatch monitor at [www.nestwatch.org](http://www.nestwatch.org). Data can then be uploaded onto their website.

## Online Resources

The Cornell Lab of Ornithology | <http://www.allaboutbirds.org/page.aspx?pid=1139>

Canadian Wildlife Federation | <http://cwf-fcf.org/en/do-something/challenges-projects/take-action-factsheets/outside/nesting-box.html>

Hinterlands Who's Who | <http://www.hww.ca/en/issues-and-topics/nest-boxes-for-birds.html>

Bird Studies Canada | <http://www.birdscanada.org/volunteer/pnw/index.jsp?targetpg=nestboxes>

