



## All About Birds

Grades K-4

### What to Expect

Our two- or four-hour *All About Birds* program at the Green Mountain Audubon Center is designed to provide students with opportunities for hands-on exploration of the amazing lives of Vermont birds led by a professional Audubon Teacher/Naturalist. After an introductory *Dress a Bird* activity, your students will receive a quick lesson in using binoculars and field guides to identify common Vermont species. We will take a hike through the fields, forests and wetlands of the Green Mountain Audubon Center, stopping to observe and identify birds in these different habitats. Your students will also get a chance learn some common bird songs through a “mate match” game and to see a collection of real bird nests and eggs up close. Depending on what we see and your students’ interests and questions, each trip will be a little different, but every program delivers plenty of time for exploration and follow-up discussion that connects students’ observations with the essential questions and understandings listed below.



### Essential Questions and Understandings

#### What makes birds special and what are birds doing in the spring in Vermont?

- Birds are the only group of animals that have feathers.
- Birds can be found in many different habitats, including in or near ponds, fields, forests, and wetlands.
- Different species of birds can be identified by observing a bird’s size, shape, feather colors and patterns, behavior, song, and habitat.
- Birds hatch from eggs.
- Many birds migrate to Vermont in the spring to mate and raise their young. They come here because there is a lot of food in the summer to feed to their young, particularly insects.
- Birds sing to attract a mate and defend a territory. Every species of bird has a different song.

### Vermont Grade Expectations

**S1-2: Scientific Questioning, Predicting & Hypothesizing** – Students work with the Teacher/Naturalist to observe, ask questions about, and make predictions regarding patterns about birds and their habitats (i.e. Why are some birds brightly colored and other dull? What is that bird doing when it flies from its perch?).

**S30: Structure and Function – Survival Requirements** – Students observe and discuss different physical structures and behaviors birds have that allow them to survive and reproduce (i.e. brightly-colored feathers on males; hollow bones; migration; nest-building; feathers etc.).

**S31: Life Cycles and Reproduction** – Students observe birds in different habitats in the process of defending territories, building nests, and gathering food to feed to young. They also compare different bird nests and eggs and discuss the role of song in avian reproduction.

**S38: Classification of Living Things** – Using binoculars, students observe a variety of toy and real Vermont birds and classify them using field guides.

### Key Words

- |            |               |               |                 |
|------------|---------------|---------------|-----------------|
| 1. Bird    | 5. Field mark | 9. Nest       | 13. Fledge      |
| 2. Beak    | 6. Song       | 10. Nestling  | 14. Insectivore |
| 3. Feather | 7. Territory  | 11. Migration | 15. Camouflage  |
| 4. Talon   | 8. Mate       | 12. Preen     |                 |



## Recommended Resources for Birds

### Children's Books

- Arnold, Caroline. *Birds: Nature's Magnificent Flying Machines*. Demco Media, 2003.
- Bash, Barbara. *Urban Roosts: Where Birds Nest in the City*. Little, Brown, 1990.
- Boring, Mel. *Birds, Nests and Eggs*. Gareth Stevens Incorporated, 1998.
- Cherry, Lynne. *Flute's Journey: The Life of a Wood Thrush*. Harcourt Brace & Co., 1997.
- Florian, Douglas. *On the Wing*. Harcourt Brace, 1996.
- Gans, Roma. *How Do Birds Find Their Way?*. HarperCollins, 1996.
- Goldin, Augusta. *Ducks Don't Get Wet*. HarperCollins Publishers, 1999.
- Herkert, Barbara. *Birds in your Backyard*. Dawn Publications, 2001.
- Jenkins, Priscilla Beiz. *A Nest Full of Eggs*. Sagebrush Education Resources, 1995.
- Jenkins, Steven and Robin Page. *Animals in Flight*. Houghton Mifflin Harcourt, 2005.
- Lasky, Kathryn. *She's Wearing a Dead Bird on Her Head!* Disney Press, 1999.
- Latimer, Janathon P. and Karen Stray Nolting. *Backyard Birds, Peterson First Guides*. Houghton Mifflin Harcourt, 1999.
- Latimer, Janathon P. and Karen Stray Nolting. *Birds of Prey*. Houghton Mifflin Harcourt, 1999.
- Lerner, Carol. *On The Wing: American Birds in Migration*. HarperCollins Publishers, 2001.
- Sayre, April Pulley. *The Hungry Hummingbird*. Millbrook Press, 2001.
- Sill, Cathryn. *About Birds: A Guide for Children*. Peachtree Publishers, 1991.
- Snedden, Robert. *What Is A Bird?* Gibbs Smith, 1997.
- Winer, Yvonne. *Birds Build Nests*. Charlesbridge, 2002.
- Yolen, Jane. *Owl Moon*. Philomel Books, 1987.

### Teacher's Resource and Activity Books

- Berrin, Larry. *Vermont Birds*. Waterford Press Pocket Guide.
- BirdSleuth* <http://www.birds.cornell.edu/birdsleuth> Cornell Lab of Ornithology inquiry curriculum.
- Burton, Robert and Steven Kress. *Audubon North American Birdfeeder Guide*. DK Pub., 2005.
- Garett, Linda and Hannah Thomas. *Small Wonders: Nature Education for Young Children*. Woodstock, VT: Vermont Institute of Natural Science, 2005.
- Lingelbach, Jenepher and Lisa Purcell. *Hands-On Nature: Information and Activities for Exploring the Environment with Children*. Woodstock, VT: Vermont Institute of Natural Science, 2000.
- Parella, Deborah. *Project Seasons: Hands-on activities for discovering the wonders of the world*. Shelburne, VT: Shelburne Farms, 1995.
- Roger Tory Peterson, Roger Tory. *A field guide to the birds: eastern and central North America*. Houghton Mifflin Harcourt, 1999
- Sibley, David. *Sibley's Birding Basics*. Alfred A. Knopf, 2002.
- Sibley, David. *The Sibley Guide to Birds*. Alfred A. Knopf, 2000.

### Websites

- All About Birds* Online Bird Guide <http://www.birds.cornell.edu/AllAboutBirds/BirdGuide/> Bird guide including photos, song files, and range maps. Text appropriate for grades 3+.
- All About Birds* Video Gallery <http://www.birds.cornell.edu/AllAboutBirds/BirdGuide/VideoGallery.html>
- Audubon California Starr Ranch Sanctuary Wildlife Videos* [http://www.starranch.org/wlife\\_video.html](http://www.starranch.org/wlife_video.html)
- Bird Pictures <http://www.mbr-pwrc.usgs.gov/id/pictlist.html>
- BirdSource* - <http://www.birdsource.org/> Provides links to several citizen science projects that you and/or your students could contribute data to (i.e. the Great Backyard Bird Count).
- Braddock Bay Bird Observatory* <http://www.bbbo.org/photos/warblers/index.html> Beautiful color photos.
- What's that bird?: A game of avian identification* <http://copland.udel.edu/~prodick/birdgame.html>