1. **Society Birds**: Students research and give an oral presentation telling how birds have been integrated into our history and society.

2. **Corvid ID**: A worksheet where students match clues to information they've read in Wildlife Express and match illustrations of different corvids.

3. **It’s Your Niche**: Students create business cards for birds or other animals.

4. **Crows vs. Ravens**: Students research information to create a chart signifying differences between ravens and crows.

5. **Flying WILD’s Bird Behavior Scavenger Hunt**: Students take a walk outside to observe and record bird behavior.

Art by Kate Dolamore, [katedolamore.com](http://katedolamore.com).
Society Birds

Subject: Language Arts & Social Studies

Objectives:

Social Studies: Students will be able to investigate roles birds have played in history.
Language Arts: Students will be able to plan and deliver an oral presentation.

Materials:
- materials for classroom presentations
- Wildlife Worksheet (Society Birds Crossword Puzzle)

Procedure:

1. Ask students to think about some way a bird was part of their life recently. Did they eat chicken for dinner? Did they watch a bird at a feeder? Did a bird call wake them up this morning? Were they called a birdbrain yesterday?
2. Explain that birds have affected human life in one way or another for most of history.
3. Divide your students into groups. Ask them to brainstorm ways in which birds have affected history. When finished, gather the groups together to come up with a group list of ideas. The list might look something like this: Food and Feathers, Recreation, Literature, Symbols, and Arts.
4. Divide students into groups and assign each group a different category from the list they developed. Students should work as a team to develop a presentation for one of the categories. Presentations should include a break down of the ideas under the particular categories. Example: Food and Feathers might include information about how birds have been used for food, (don’t forget eggs!) and how we have used feathers for other things as well, (feather beds, down vests, quill pens). Recreation might include falconry, bird watching, pets, photography and hunting. Literature could include poetry, fairy tales, myths, and cartoons. Symbols might include sports teams, national and state symbols, common sayings, birds used in advertising, etc. Arts could include paintings, sculptures, carvings, songs, dance, stamps and coins.
5. Students should work to make the presentation educational (and fun) for their audience. Short plays, visual aids and activities to get the audience involved should be encouraged.
6. Record the presentations and share with others!
7. When finished, have the students complete the Wildlife Worksheet (Society Birds Crossword Puzzle).
Across
6. The ugly ________ was really a beautiful swan.
7. To talk ________, is to speak frankly and get down to the basic facts of a matter.
8. "Birds of a feather ________ together."
10. This bird can be found in southwestern deserts. In cartoons, he's Wile E. Coyote's enemy.
12. "Crazy as a ________ ."
13. This black and white bird is often considered mischievous and noisy.
16. "Silly as a ________ ."
17. This bird is the national bird of the Bahamas. Sometimes people in our country decorate their lawns with statues of it.
19. Farmers sometimes use a scare ________ to keep birds away from their crops.

Down
1. Stories are told about this bird delivering human babies.
2. Rhyming with love, this bird also is a symbol for peace.
3. A camp robber by trade.
4. Idaho's state bird.
5. This scavenger bird feeds mostly on carrion. Sometimes greedy people are called this name.
9. This small yellow bird is a popular pet and was once used by miners to test for dangerous gases.
11. In Idaho, the coming of this bird signals the beginning of spring.
14. Egyptians used these birds as messengers as early as 3000 B.C. Nearly 20,000 of these military messengers were killed during World War I.
15. Our national bird.
18. The Trumpet of the ________, by E.B. White is a story of love, friendship and coming to terms with a disability.
Across
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7. To talk ________ is to speak frankly and get down to the basic facts of a matter.
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Corvid Identification

A
B
C
D
E
F
G
H
I

Match the clue with the correct name of the bird. Write the correct letter on the first line and the name of the bird on the second line. Wordlist: Woodhouse’s scrub-jay, pinyon jay, blue jay, Steller’s jay, Clark’s nutcracker, black-billed magpie, American crow, raven & Canada jay.

This bird, with its black mohawk crest, might be considered a camp robber. _____ / ________________________

This jay has a longer tail than some jays. _____ / ________________________

This bird is the largest corvid. _____ / ________________________

This jay might be found in pinyon-juniper forests. _____ / ________________________

This bird, named after William Clark, stores food in thousands of caches. _____ / ________________________

This very common bird will have a sentinel for lookout, so others in the flock can eat safely. _____ / ________________________

This bird will call loudly when it finds one of its kind that is dead. Others of the species will gather for a 10 - 15 minute funeral. _____ / ________________________

This bird may mimic a red-tailed hawk. _____ / ________________________

This jay is gray and has a name from another country. _____ / ________________________
Match the clue with the correct name of the bird. Write the correct letter on the first line and the name of the bird on the second line. Wordlist: Woodhouse's scrub-jay, pinyon jay, blue jay, Steller's jay, Clark's nutcracker, black-billed magpie, American crow, raven & Canada jay.

This bird, with its black mohawk crest, might be considered a camp robber.  H / Steller's jay

This jay has a longer tail than some jays.  B / Woodhouse's scrub-jay

This bird is the largest corvid.  E / raven

This jay might be found in pinyon-juniper forests.  D / pinyon jay

This bird, named after William Clark, stores food in thousands of caches.  C / Clark's nutcracker

This very common bird will have a sentinel for lookout, so others in the flock can eat safely.  A / American crow

This bird will call loudly when it finds one of its kind that is dead. Others of the species will gather for a 10 - 15 minute funeral.  C / black-billed magpie

This bird may mimic a red-tailed hawk.  F / blue jay

This jay is gray and has a name from another country.  I / Canada jay
Subject: Science

Objective: Students will be able to define habitat and niche and create business cards for particular animals.

Materials
- 3" x 5" blank index cards or pieces of construction paper cut business card size
- Writing and coloring materials
- Animal books for researching

Procedure:

1. Review habitat with students. (food, water, shelter, and space in a suitable arrangement.) Tell students that habitat can be considered an animal's address. Explain to students that in this activity they will be not only looking at animals' addresses, but animals' jobs, as well.
2. Talk about the neighborhood the students live in. Everyone has an address and most people have jobs. The job might be a role that person plays in the community. Animals have roles in the ecosystem, or community, that they live in. This role is called the animal's ecological niche. It includes such things as where and how it gathers its food; its role in the food chain; what it gives and does for the community; its habits, periods of activity, etc. It can also be described as what an animal does for a living.
3. Allow students time to choose and research a certain Idaho animal to find out its niche and choose one thing this animal does well.
4. Their assignment will be to create a business card for that animal advertising its job in the community. To help them, you may want to bring in a few "real" business cards to look at.
5. Here are a few samples of animal business cards:

<table>
<thead>
<tr>
<th>Rick Raven</th>
<th>Buzz Mosquito</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Cleanup</td>
<td>Plasma collector/blood sucker</td>
</tr>
<tr>
<td>Unlicensed, Unbonded, Uninsured</td>
<td>123 Stick-it-to-you Lane</td>
</tr>
<tr>
<td>Your trash is our treasure</td>
<td>Everywhere, Idaho</td>
</tr>
<tr>
<td>Call 1-800-Wise-guy</td>
<td>We'll suck you drier than a vampire</td>
</tr>
<tr>
<td></td>
<td>Call 1-800-drink-blud</td>
</tr>
</tbody>
</table>

6. Business cards should include the following: name of animal, job title, company name, address, phone number, slogan and illustration or symbol for business (optional).
7. Hang business cards on your bulletin board and call it "Whose Niche?"
Research differences between ravens and crows. Look at the clues below and write them in the correct box.

<table>
<thead>
<tr>
<th></th>
<th>CROW</th>
<th>RAVEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>size</td>
<td></td>
<td></td>
</tr>
<tr>
<td>beak</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tail</td>
<td></td>
<td></td>
</tr>
<tr>
<td>habitat type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>behavior</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sound</td>
<td></td>
<td></td>
</tr>
<tr>
<td>gathering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>flying</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CLUES:
smaller; size of a pigeon
larger; similar in size to a red-tailed hawk
large heavy beak
slim, lightweight beak
fan shaped
wedge shaped
usually found in more urban areas
prefers to live in forested areas
less social and more cautious
social and bold
low croaking sound
caw, caw
large flocks & families
usually alone or with one more
soars like a hawk
flaps wings
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</tr>
<tr>
<td>beak</td>
<td>slim, lightweight</td>
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</tr>
<tr>
<td>tail</td>
<td>fan shaped</td>
<td>wedge shaped</td>
</tr>
<tr>
<td>habitat type</td>
<td>found in more urban areas</td>
<td>prefers to live in forested areas</td>
</tr>
<tr>
<td>behavior</td>
<td>social &amp; bold</td>
<td>less social &amp; more cautious</td>
</tr>
<tr>
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<td>caw, caw</td>
<td>low croaking sound</td>
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**CLUES:**

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soars like a hawk
flaps wings
Bird Behavior Scavenger Hunt

Overview
Following this bird-based version of a scavenger hunt, students observe various behaviors of birds.

Content Area
Science, Language Arts, Environmental Education

People Power
Any group size

Space Requirement
Outdoors

Activity Time
One class period (can be extended), plus preparation

Materials
- Observing Birds in the Wild worksheet, 1 copy per student, pair, or group
- Field guides
- Notebook
- Pencil
- Optional: Binoculars
- Optional: Tips for Successful Field Experiences (see page 318)

Special Guests
Contact a local member of the Audubon Society, or the owner of a bird watching supply store to discuss methods and tips for observing birds. Have them specify reasons for specific behaviors.

Terms to Know
Behavior, flocking, roosting

Look at what that bird's doing!

Learning Objectives
Students will learn to identify different behavior patterns of birds and explain their function.

Background
Observing birds in the wild is fun but does take some patience and skill. The observer must be able to locate the bird, watch what it is doing, and try to identify it—all within a few moments. This activity concentrates on looking for different behaviors exhibited by songbirds.

Songbirds may be perching on a branch, singing to attract mates, feeding their young, searching for food on the ground, preening their feathers, or performing any number of other behaviors. A bird's behavior may result from a particular adaptation that helps the bird survive. For example, flocking is a behavioral adaptation that helps birds in several ways. It can protect a bird from a predator by creating safety in numbers—most flocks can more easily drive away a predator as a group than as individuals. Also, birds located at the center of the flock are especially safe, as the surrounding birds act as a protective barrier. Also, by having more birds available to warn against predators, the majority of birds are able to spend more time feeding and less time “watching out.”

Bird behaviors are as plentiful and varied as the physical adaptations found among the many different types of birds. A behavior may be specific to one species or found in many species. For example, a White-breasted Nuthatch can walk down a tree head-first—an unusual behavior for almost any type of bird. On the other hand, many bird species have developed the successful behavior of roosting communally, which involves banding together for shelter and protection from predators, primarily during sleep. Roosting enables group members to stay warm at night, which also helps conserve food.
resources. In addition, some members of the flock remain alert at all times, which provides further protection against predators. Also, the roosting flock shares information about available food resources when leaving the roost each day.

Knowing the behavior patterns of birds and of different species of birds is fundamental to our understanding of songbirds and can help in their conservation. Before going out to observe birds in an area, think about where birds may be found and what time birds are most active. Songbirds tend to be very active in the morning and evening.

Getting Ready
1. In this exercise, students are looking for birds exhibiting different types of behavior, like flying, feeding, or singing. Review the Tips for Successful Field Experiences (on page 318).
2. Choose an area where you can take students out to conduct the search.

Taking Flight!
1. Take students to the site where they'll conduct their search. Students can work individually, in pairs, or in groups.
2. After spotting a behavior, students can place a check in the space provided on the worksheet. They should try to identify the species if possible.
3. Return to the classroom and summarize the information. Have students discuss why a particular behavior may be a benefit or detriment to a bird. Consider the following questions: Were any behaviors not observed? Why? Did any single species seem to be exhibiting a particularly distinctive behavior? Why?

Assessment
Ask students to discuss the following questions:
1. In pairs, act out the behavior of the bird you observed and have the class guess what you are doing and why. Explain to the class how these behaviors may benefit songbirds.
2. A bird's behavior can sometimes help in identifying the bird. List one behavior you observed that helped identify the bird and explain why.

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### Observing Birds in the Wild Worksheet

Look for the behaviors listed below. Check those you find, then list the bird's specific location and habitat. If you can, identify the species. If not, list some identifying features.

<table>
<thead>
<tr>
<th>Check</th>
<th>Behavior Items</th>
<th>Specific Location and Habitat</th>
<th>Identification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Singing or calling (Mostly males.)</td>
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<td></td>
<td>Preening (Sometimes looks as if it is nibbling, tugging, or combing its feathers with its beak.)</td>
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<tr>
<td></td>
<td>Bathing in water</td>
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<tr>
<td></td>
<td>Taking a dust bath</td>
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<tr>
<td></td>
<td>Soaring</td>
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<tr>
<td></td>
<td>Flying (Its wings are beating.)</td>
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<td></td>
<td>Perched on a limb or branch</td>
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<tr>
<td></td>
<td>Hovering in mid-air (wings beating rapidly.)</td>
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<tr>
<td></td>
<td>Swimming</td>
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<td></td>
<td>Walking or hopping on the ground</td>
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<td></td>
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<tr>
<td></td>
<td>Diving or tipping up its rump in the water</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Standing on the ground</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Wading in water</td>
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<td></td>
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<tr>
<td></td>
<td>Feeding</td>
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<td></td>
<td>Flying with a worm or insect in its mouth</td>
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<td></td>
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<tr>
<td></td>
<td>Flying with or gathering twigs, grasses, leaves, string, etc.</td>
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<td></td>
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<tr>
<td></td>
<td>Perched on the edge of its nest</td>
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<td></td>
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<tr>
<td></td>
<td>Climbing a trunk or branch</td>
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<td></td>
<td>Hanging upside down from a branch</td>
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<tr>
<td></td>
<td>Chiseling into the side of a tree or branch</td>
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<td></td>
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<tr>
<td></td>
<td>Perching on a wire, fence post, tree snag, over an open area</td>
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<tr>
<td></td>
<td>A group of birds perching together on a phone/electrical wire</td>
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<tr>
<td></td>
<td>A flock of small birds chasing a large bird</td>
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<tr>
<td></td>
<td>A group of birds flocking together</td>
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<td></td>
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<tr>
<td></td>
<td>Other (List behavior)</td>
<td></td>
<td></td>
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</table>