

Birds of Prey

Author: Diane Cook, Flemington Raritan School District

This lesson is designed for second grade, but can easily be adapted for other grades. It is also meant for 5 different classes (since this is what I teach), but again can easily be adapted for 1 class. Each lesson takes about 35-40 minutes.

New Jersey Core Curriculum Content Standards 5.1.P.B.2, 5.1.P.B.3 5.1.P.C.1, 5.3.2.A.1, 5.3.2.B.1, 5.3.2.B.2, 5.3.2.C.2, 5.3.2.C.3, 5.3.2.E.1, 5.3.2.E.2

CCCS L.2.1, L.2.3, R.I.2.4, R.I.2.5, R.I.2.9, SL.2.1, SL.2.3, W.2.6 W.2.7

Objectives

- Students will work cooperatively to develop research skills
- Students will create a digital story
- Students will develop an understanding and awareness/appreciation for various birds of prey and their place in our environment, what it means when a species is endangered, threatened, or of special concern, and what we can do to help them recover

Materials

- bird of prey life sized silhouettes
- photos of birds of prey (Photos could be printed or shown on a computer. A great resource is Cornell Ornithology's website, Conserve Wildlife Foundation of NJ - see Resources section.
- movies of birds of prey in action (search Youtube, National Geographic of Kids, Cornell Ornithology, Conserve Wildlife Foundation of NJ)

Vocabulary: bird of prey, raptor, talons, habitat, conservation, pesticide, endangered, threatened, special concern

Procedure:

Before teaching, set up class groups.

5 Classes - each class is assigned a different bird of prey to research and report findings to others. OR 1 class with 5 groups. Each group is assigned a different bird.

- Bald Eagle (class sample to model the process)

- Osprey
- Peregrine Falcon
- American Kestrel
- Red-tailed Hawk
- Screech Owl

Each Class has 5-6 groups. Each group works together to research a different part of the bird's profile. OR Each bird of prey group in 1 class researches all the topics below for their bird.

Topics to research

- habitat
- food (diet)
- nesting/egg facts
- appearance adult/young
- behavior
- conservation
- other cool facts

Lesson 1: To get students' attention show photos, videos, and observe live cams of birds of prey (see resources list). Have stations set up around the room and students move from station to station to experience each using a variety of media - books, magazines, iPads, Chromebooks, computers. In my computer lab, I will be using my web page, and students will be able to visit links I've gathered and posted. Gather together and ask students if they have seen birds like these and where? Allow time for personal stories. Engage students in discussions about observations, habitats, birds' appearance, nesting, etc.

Introduce the term bird of prey/raptor. Ask if anyone knows what that means. Guide discussion to define the term, using photos (printed or on the Internet) to give clues/visual (eagle catching a fish, owl with a mouse in talons), and calling attention to/explaining the talons to hold onto prey, beak to tear and eat meat, and coloration to blend in with their surroundings.

To excite students, show the silhouette of the Bald Eagle. Ask what bird it represents. Tell, if after a few guesses, students do not yield the answer. Display silhouettes of the other birds labeled with the name and assign to each class. Explain that each of the second grade classes will research a different bird to teach each other.

Modification for single class lesson: Tell students they will be working in groups to research and then report on 1 of these birds of prey. Break into groups and give a photo of one of the birds of prey to each group. Ask groups to look at the photo and then try to match it to the

silhouette, this will be your group's research project. Check and guide groups to the proper silhouette. Groups sit together next to their silhouette.

Conclude this lesson by telling students that next class they will practice and learn how to research their bird. Everyone will do one together to learn how and practice researching skills, the Bald Eagle.

Lesson 2: Research practice. Ask students what kinds of questions they might have about the bald eagle. Chart responses. Call attention to key words - How can we find the answers - books, Internet. Explain that the Internet will be used to find out more about the eagle. (See Resources for appropriate sites.) Teacher and students will explore appropriate sites and read for key words - habitat, food (diet), nesting/egg facts, appearance adult/young, behavior, conservation, and other cool facts. Practice one, habitat together. Teacher will write down the information on a "storyboard" (paper or appropriate computer software/app) to take notes. This time assign remaining research topics to small groups of students. All students will have a storyboard to record notes. Give groups time to read and find information on the assigned topic.

Each team of researchers (groups formed in the previous lesson) will be responsible to find facts about a topic of the eagle's life. Topics may be written on cards. Fan out cards and a team rep will pick a card. Teacher may also assign a topic matching student abilities with difficulty of reading material. Using the web sites in the resources, students may read with a partner to find answers to their topic.

Lesson 3: Groups will use appropriate app or software to report information. Pixie (drawing software with text option for computer or iPad Google Slides). If using Pixie, students will insert a text box and take turns writing the information found on their assigned topic. Using drawing tools and stickers, student will take turns to create an illustration that reflects facts. Students will save to a central location so teacher can access all and bring together in one complete student project. The same steps can be taken if using PowerPoint. Each team member writes 1 fact for their topic and inserts a photo or original artwork created in the drawing program. Teacher grabs all finished slides and adds to one final class presentation.

If using Google Slides, I create a class presentation with one title slide, a credits page, and give all students editing rights. The presentation is shared with all students, opened, and teacher guides each student to add one slide. This is the slide to which they will add information and a photo. I have also had students complete an illustration only in Pixie and Create an Image from the file. It is saved as a "jpg" and can be brought into the presentation. Teams work together to complete the slide. Each of the topics students researched, can be a "chapter" slide created by

the teacher. Students will click on the “chapter” slide and insert their own in that section. Each member of the team may write and illustrate their own part of the topic.

Example: My team researched diet. Student 1 will write about their bird eating fish and illustrate it. Student 2 will write about their bird eating small mammals and illustrate it. Student 3 will etc. Each student on the team will write 1 simple fact and illustrate since keyboarding skills are just being learned.

Finished presentations are published on teacher’s website or similar media outlet. Teachers may wish to print work to make a poster to display in hallway, along with a diorama of the bird’s habitat.

Research Resources

- Conserve Wildlife Foundation
<http://www.conservewildlifenj.org/protecting/projects/baldeagle/>
- [2014 Annual Bald Eagle Project Report](#)
- [2013 Bald Eagle Project Report](#)
- [2012 Bald Eagle Project Report](#)
- [2011 Bald Eagle Project Report](#)
- <http://www.conservewildlifenj.org/species/fieldguide/view/Haliaeetus%20leucocephalus/> (bald eagle)
- <http://www.conservewildlifenj.org/species/fieldguide/view/Pandion%20haliaetus/> (osprey)
- <http://www.conservewildlifenj.org/species/fieldguide/view/Falco%20sparverius/> (American kestrel)
- <http://www.conservewildlifenj.org/species/fieldguide/view/Falco%20peregrinus/> (peregrine falcon)
- <http://www.conservewildlifenj.org/species/fieldguide/view/Asio%20otus/> (long-eared owl)
- <http://www.conservewildlifenj.org/species/fieldguide/view/Tyto%20alba/> (barn owl)
- Cornell University Bird Guide <http://www.birds.cornell.edu/Page.aspx?pid=1478>
- Delaware Valley Raptor Center <http://www.dvrconline.org/raptorprof.html>
- Diane Cook Bald Eagle Blog <http://www.frsd.k12.nj.us//site/Default.aspx?PageID=885>

Live Cams

- Duke Farms Bald Eagle Cam <http://dukefarms.org/en/Stewardship/WildlifeCams/eagle-cam/>
- Cornell Ornithology Cams: barn owls, hawks, herons
- Raptor Resource Project eagles, owls, falcons, and more
http://www.farmyou.com/falcon_cams/index.html
- Ozzie and Harriet - bald eagles of Florida <http://www.dickpritchettrealestate.com/eagle-feed.html>
- Explore - osprey, penguins, owls, puffins <http://explore.org/live-cams/player/live-osprey-cam>