



Adopt-A-Duck – Canada Goose Curriculum Introduction

Objectives:

- Describe the calls of waterfowl through group discussion
- Identify the calls of various waterfowl and the reasons for different types of waterfowl calls through group discussion
- Demonstrate/describe the different sounds made with duck calls through group discussion and/or acting
- Identify ways to reduce urban waterfowl populations through group discussion
- Identify the importance of wetlands for waterfowl survival through group discussion and writing

Materials:

- Computer with speakers, a projector, and internet access
- Waterfowl calls CD and CD player (optional)
- Plastic straws
- Scissors
- Pencils
- Nature Notebooks (or notebook paper)

Instructions:

Go through each of the sections below and lead discussion on each topic, then complete the associated science and/or art activity associated with each. The sections/activities are as follows:

- p. 1 Adopt-A-Duck – Canada Goose: Curriculum Introduction
- p. 2 What is a Canada Goose?
- p. 3 Call of the Wild: Waterfowl Calls
- p. 4 *Activity:* Make a Simple Duck Call
- p. 6 Urban Waterfowl – Make Way for Ducklings and Goslings
- p. 6 *Activity:* Sebastian the Goose
- p. 7 Investigate: Urban Waterfowl
- p. 8 *Activity:* Urban Waterfowl: “Warner Park Geese are Cooked”
- p. 11 Why are Wetlands Important for Waterfowl Survival?
- p. 11 *Activity:* Create a Conservation Message

Following the Adopt-A-Duck curriculum, visit:

- <http://extension.udel.edu/4h/junior-duck-stamp-program/> for more information on the Delaware Junior Duck Stamp Program (DE JDSP) and state competition deadlines
- <http://www.fws.gov/birds/education/junior-duck-stamp-conservation-program/junior-duck-stamp-contest-information.php> for more information on JDSP competition rules and resources

Developed by A. Starcher, December 2015



What is a Canada Goose?

Canada geese (*Branta canadensis*) are a waterfowl common in Delaware and throughout North America. Canada geese are herbivores. During migration in Delaware and other coastal areas, they tend to live in agricultural fields near marshes because of the abundant food available. They are also known to form strong family and pair bonds, and they tend to return to their birthplace to nest each year.

“Both sexes of Canada geese have a black head and neck except for broad white cheek patches extending from the throat to the rear of the eye. The female of a breeding pair is often smaller. The breast, abdomen and flanks range in coloring from a light gray to a dark chocolate brown, either blending into the black neck or being separated from it by a white collar. The back and scapulars are darker brown, the rump is blackish and the tail is blackish-brown with a U-shaped white band on the rump. The bill, legs and feet are black. Most subspecies are uniformly large and pale and exhibit the characteristic ‘honking’ call.” – Ducks Unlimited Waterfowl ID – Canada Goose



CREDIT: BILL HOUGHTON



CREDIT: ROBERT SENDREIN

To listen to a Canada goose call, visit <http://www.ducks.org/hunting/waterfowl-id/canada-goose#ad-image-0>.

Images and description quotation retrieved on 6 December 2015 from <http://www.ducks.org/hunting/waterfowl-id/canada-goose#ad-image-0>



Call of the Wild: Waterfowl Calls

Unit-by-Unit Guide | Unit 1. What is ...a Waterfowl?



Bird Songs

Description: “Quack” and “honk” are usually the ways we describe duck or goose calls. Waterfowl calls, however, can be very surprising. Some duck calls, for example, sound much like frogs. In this activity students work with a partner to listen to waterfowl sounds on the Internet or a CD. They listen to calls from at least three different waterfowl species and then try to distinguish how the calls are alike or different.

Setting: Indoors

Junior Duck Stamp Conservation & Design Program | Educator Guide



You can also access a wide variety of waterfowl calls by visiting the Ducks Unlimited Waterfowl ID website: <http://www.ducks.org/hunting/waterfowl-id>. Play the waterfowl calls to the participants, telling them each time if the call they heard was the call of a duck, goose, or swan.

Discuss the following:

- How would you describe a duck song? How about the song of a goose or a swan?
- Do the different species have different songs from one another? Why do you think this?

Waterfowl Song Guessing Game

After several samples of duck, geese, and swan calls have been played, play a guessing game. Play a call for the participants and have them guess if the song is from a duck, a goose, or a swan using clues and knowledge from the calls they heard earlier.

Unit 1. What is... a Waterfowl?

Bird songs. Each bird has a distinctive call or song. Find a recording of waterfowl calls that are common in your area by searching online or checking out a CD from the library.

ACTIVITY: Work with a partner. Close your eyes and ask your partner to play 2 or 3 duck or goose calls. Can you tell the difference? Which call is for which bird?



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USFWS JDSP Educator Guide “Bird Songs” retrieved on 6 December 2015 from <http://www.fws.gov/migratorybirds/pdf/education/JuniorDuckStamp-EducatorGuide.pdf>

USFWS JDSP Youth Guide “Bird Songs” retrieved on 6 December 2015 from <http://www.fws.gov/migratorybirds/pdf/education/JuniorDuckStamp-YouthGuide.pdf>



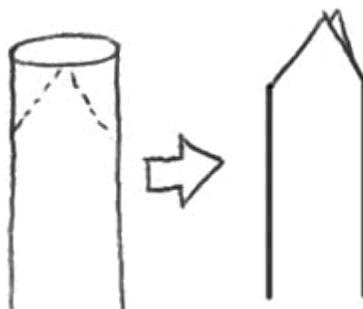
MAKE A SIMPLE DUCK CALL

YOU WILL NEED:

- One plastic straw from your kitchen or local fast food restaurant
- Scissors
- Lungs (don't worry you already have them)

WHAT TO DO:

1. Use your fingers to press on one end of the straw to flatten it - the flatter the better.
2. Cut the flattened end of the straw into a point (see below).



3. Flatten it out again real good.
4. Now take a deep breath, put the pointed end of the straw in your mouth and blow hard into the straw. If all goes well you should hear a somewhat silly sound coming from the straw. The smaller you are, the harder it may be to get a good sound - sometimes adults can get more of a sound thanks to their bigger lungs. If you still have trouble, try flattening it out some more or cutting the straw in half.
5. Don't stop there - try cutting the straw different sizes to see how the sound changes, or make another identical straw and add the pointed end of the new straw to the uncut end of the first straw (to make the first straw longer) The sound



will be very different, (more like a moose call!) and you will have to blow even harder, but give it a try.

HOW DOES IT WORK?

This is science? It sure is. You see all sounds come from vibrations. That little triangle that you cut in the straw forced the two pieces of the point to **VIBRATE** very fast against each other when you blew through the straw. Those vibrations from your breath going through the straw created that strange duck-like sound that you heard. Now you will never be bored again when you go to a fast food restaurant! Have fun!

MAKE IT AN EXPERIMENT

The project above is a **DEMONSTRATION**. To make it a true experiment, you can try to answer these questions:

1. Which size straw call sound the most like a duck?
2. Which length of straw is the easiest to get a sound? Which is the hardest?
3. Does the diameter of the straw affect the sound it produces?

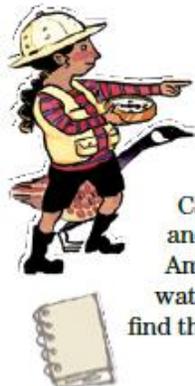
Science Bob

Retrieved on 10 March 2013 from <http://www.sciencebob.com/experiments/duckcall.php>



Urban Waterfowl

Unit 5. Learning from the Past; Taking Action for the Future



Theme: Urban Waterfowl

EXPLORE

Urban Waterfowl – Make way for Ducklings and Goslings! Mallards and Canada Geese are very adaptable species. They can survive very well around humans and there are thriving populations of these birds in many cities and towns across North America. Many people like to see ducks, geese, and swans in city parks. People enjoy watching hens guiding their ducklings in ponds and across busy city streets. Other people find these birds to be a nuisance, especially if their numbers get too large.

ACTIVITY: What problems do waterfowl cause when they choose to live in a suburb or city? Sometimes humor can help us understand. Watch the YouTube video about Sebastian the Goose, and answer the questions about Sebastian in your Nature Notebook. After watching the video, list as many problems that you can think of that waterfowl might cause when they live within a city or town. Do you think the benefits are worth the cost? (NOTE: If you can't access the YouTube video, check out the Urban Waterfowl activity in the *Investigate* section and read the news article about geese in Madison, Wisconsin.)



Questions about the YouTube clip:

- Where does Sebastian live?
- What does Sebastian like to eat?
- Where does Sebastian leave his feces (poop)?
- What challenges does Sebastian face in these urban areas?
- Is Sebastian's favorite place to live safe for his goslings?
- What is Sebastian's solution for reducing the number of geese in urban areas? And what would you recommend to people who own or take care of land near water (like a park, recreation or picnic area, golf course, or family home)?



Junior Duck Stamp Conservation & Design Program

USFWS JDSP Youth Guide "Urban Waterfowl – Make way for Ducklings and Goslings" retrieved on 6 December 2015 from <http://www.fws.gov/migratorybirds/pdf/education/JuniorDuckStamp-YouthGuide.pdf>



Unit 5. Learning from the Past; Taking Action for the Future



INVESTIGATE

Urban Waterfowl. Is there a problem with too many ducks, geese, or swans in your town? Does your town have a strategy to deal with these challenges? There is much disagreement about what to do about urban waterfowl.

ACTIVITY: Review the news article on page 168 about Canada Geese in a city park in Madison, Wisconsin: What questions do you have about this issue? What are some of the different views of the people interviewed? What do you think should be done? How can you learn more?

- Investigate to find out more. If you have Canada Geese present in parks in your area, apply your investigation skills to see if you can learn something about what attracts geese to the area or how to reduce any problems you've noticed. In Units 1, 2, and 3, you learned how to ask a question, pose a hypothesis, and design a study. In your Nature Notebook, write down your question about urban waterfowl. What is your hypothesis?



My question:

My hypothesis:

- Mallards also pose similar problems in some cities. Are there too many ducks or geese living near you? Interview people in your community to learn about their concerns and what they think should be done. Also talk about the problem with a conservation professional, if possible. Keep notes in your Nature Notebook.

Junior Duck Stamp Conservation & Design Program



USFWS JDSP Youth Guide "Urban Waterfowl" retrieved on 6 December 2015 from <http://www.fws.gov/migratorybirds/pdf/education/JuniorDuckStamp-YouthGuide.pdf>



Unit 5. Learning from the Past; Taking Action for the Future

Warner Park Geese are Cooked

By Kristin Czubkowski | *The Capital Times* |

Posted: Friday, April 16, 2010 6:34 am. Reprinted with permission.

Citing the need to prevent a “Miracle on the Hudson” emergency landing in Madison, the city’s Board of Park Commissioners signed off Wednesday night on a plan to kill geese at Warner Park.

The reduction proposal would involve the first lethal measures taken against geese in a Madison park despite years of discussion about how these geese—and their droppings—are overwhelming city parks, particularly Vilas Park on the near west side.

The hazard the large birds pose to airport traffic, however, has sped up the process at Warner Park, located off Northport Drive on the north side, with introduction and approval of the plan all at the same meeting.

The proposal was brought forth by representatives of the Dane County Regional Airport, who confirmed on Thursday that they were proposing that 80 to 100 geese be captured and euthanized early this summer, when the birds are molting and flightless.

The geese would be euthanized by U.S. Department of Agriculture staff according to American Veterinary Medical Association-approved

methods, Dane County environmental officer Lowell Wright said at the parks commission Wednesday night. Once tested for safety, the meat could be donated to local food pantries.

Airport operators are responsible for wildlife management within 10,000 feet of an airport according to federal regulations, Wright told commissioners. Warner Park is 7,500 feet from the airport’s main runway and was identified as a problem area after nine of the 67 birds captured on airport land in 2008 and 2009 were found to be Canada geese banded by the Wisconsin Department of Natural Resources at Warner Park. The DNR counted 132 resident geese in the park in that 2007 banding.

Geese, due to their large size, are particular flight hazards because they cause substantial damage when they are struck by airplanes or sucked into engines, said Dane County Regional Airport spokeswoman Jennifer Miller. Most notably, a flock of geese disabled the famous Flight 1549 out of New York in January 2009, which prompted a “miraculous” emergency landing on the Hudson River.

After the incident, New York officials approved the

killing of more than 1,200 geese near the city’s major airports and the Federal Aviation Administration required all major airports to conduct wildlife hazard assessments if they had not already.

“I think you’ve got a dangerous situation there. I don’t want to test out another Miracle on the Hudson here,” said Ald. Joe Clausius, a member of the commission.

But Trish O’Kane, a UW-Madison Nelson Institute Ph.D student in environment and resources who frequently studies birds at Warner Park, is not yet convinced the situation is that dire.

O’Kane, who was at the parks commission meeting for another item on the agenda, said in an e-mail Thursday to *The Capital Times* that she was “stunned” by the proposal and the speed with which it passed.

She says she has a lot of questions about it, including whether Warner Park geese have become an unfair target with only nine of the 67 birds “dispatched” at the airport in the past two years confirmed to be Warner Park geese.





Unit 5. Learning from the Past; Taking Action for the Future

O’Kane also noted from airport-provided numbers that bird observations dropped from 5,396 in 2008 to 1,586 in 2009 and wanted to know how the observations were being made.

She also questioned whether capturing and killing the Warner Park geese might disturb other birds nesting at Warner Park and wondered why other habitat modifications were not considered, particularly since the practice of mowing grass down to the water’s edge creates the physical environment geese like.

“Is the parks department going to stop creating geese habitat as part of geese management, or are they just going to kill geese every year?” she asked. “Thirty years ago, according to neighbors, there were hardly any geese in Warner Park because the grass was tall. Neighbors report that there were flocks of pheasants, not geese.”

Environmental history is important, she added. “We just keep repeating the same mistakes.”

Two members of the parks commission wanted to refer the proposal for another month, but didn’t get enough votes to do so.

Parks staff were generally supportive of the reduction plan, noting that they would also work with airport staff to develop a long-term management plan for the geese that would include such non-lethal measures as habitat modification and active harassment.

The city has long documented geese problems at Vilas Park, with geese feces blamed for much of Lake Wingra’s water quality issues. Despite years of discussion about the nuisance and potential public health hazard, however, city officials have never engaged in any concerted effort to remove the birds.

But some people say mitigation efforts are long overdue. Jim Lorman, an Edgewood College professor who has studied the goose population at Vilas Park, says the airport safety issues might jumpstart citywide efforts aimed at goose population management.

“There basically hasn’t really been an effort. The effort that has existed has been very, very minor,” he says, citing an experimental planting effort at the Vilas Lagoon that volunteers hoped would discourage geese from nesting.

Lorman serves on the Dane County Lakes and Watershed Commission and Friends of Lake Wingra, both of which are currently involved in planning efforts for water quality and geese management. Lorman also has studied the effects of the geese with his students, calculating at one point that the 42-acre Vilas Park accumulates about 600 pounds of goose poop per acre—and more when migratory populations stop over.

While harassment could prove effective, particularly with the use of trained dogs, Lorman says it often takes years to retrain geese to find other habitats. He supports “harvesting,” saying it would likely prove the most effective method for reducing the number of geese as long as systematic management takes place after the harvest.

“You can’t blame them for taking advantage of the fantastic environment we’ve set up,” he says. “It’s a problem that we have created and it’s up to us to change that.” ■



INVESTIGATE



Unit 5. Learning from the Past; Taking Action for the Future

Investigate & Curious Facts



MICHAEL

How come waterfowl do so well living in cities?



USFWS photo

HANNAH

It's simple biology: Waterfowl will live wherever they can find the food, water, shelter, and space that they need. Not all kinds of waterfowl will use the kind of space that is available in cities, but some sure do love it!

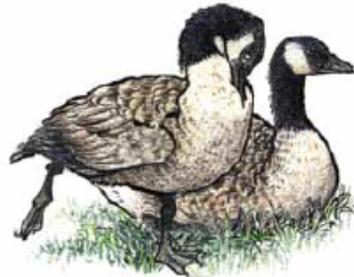


ASHLEY

I think we humans have created excellent waterfowl habitat in cities, often without realizing it. Geese and ducks love to eat short, tender grass, especially when sprinkled with tasty fertilizer. It's even better when their food is near water, like a pond.

HANNAH

Yeah, the large mowed lawns, parks, and golf courses are perfect habitat for Canada Geese! There are fewer predators in the city and usually no hunting allowed. There may be farmland close-by to provide leftover corn and other grains that may even last through the winter months. It sounds perfect, if you're a goose!



Water Resources Clip Art, University of Wisconsin-
Extension Environmental Resources Center, 1999



Junior Duck Stamp Conservation & Design Program

USFWS JDSP Youth Guide "Investigate and Curious Facts" retrieved on 6 December 2015 from <http://www.fws.gov/migratorybirds/pdf/education/JuniorDuckStamp-YouthGuide.pdf>



Why are Wetlands Important for Waterfowl Survival?

Wetlands, and the uplands surrounding them, provide habitat essential for waterfowl survival. Vegetation, as well as some animals (invertebrates and fish), found in wetland environments are primary food sources for waterfowl. These areas also offer shelter for building nests, incubating eggs, and raising young. Loss of these habitats can result in the use of urban areas by waterfowl for habitat.

Create a Conservation Message

Create a conservation message inspired by your understanding of the impacts of wetland and natural habitat loss on waterfowl survival. Use the Junior Duck Stamp Program Conservation Examples below to assist you in developing this message. The Conservation Message participants prepare today can compete in the State Competition with their Artwork.

Examples of Conservation Messages

The Conservation Message is meant to be a motto, saying or guiding principle expressed as a short statement that expresses what students have learned, experienced, and think about nature and wildlife conservation. It encourages students to use language arts, along with their paintings and drawings, to help record what they see, feel and think.

When developing their message, students might want to ask themselves the following questions:

- What have you learned about ducks, geese, or swans?
- What do you like about waterfowl?
- What is the most important thing you learned about wetlands?
- Using all your senses, how would you describe a wetland?
- Why is it important to learn about conservation efforts?
- What do you think are the greatest threats to waterfowl habitats?
- How can you personally impact waterfowl habitat?
- How can you change the world?

While students are encouraged to read published works and collect their favorite nature-oriented sayings, we again caution them against plagiarizing and copying quotes from others.

Below are the Conservation Messages that have been judged best of show at the Federal Junior Duck Stamp Contest. They are examples of the many thoughts students express each year.

“When conservation becomes a way of life, it benefits all life.”
Chris Thiessen, Kentucky, 2006

“Spread your wings, create a splash, make a difference.”
Allison Armstrong, age 17, Arkansas, 2011

“Conservation is the key to a better environment for all.”
Paul Willey, age 18, Arkansas, 2007

“Valora, Proteje y Preserva su Habitat.” (“Appreciate, Protect and Preserve Your Habitat.”)
Amarylis Montalvo, age 15, Puerto Rico, 2012

“Conservation is our respect for the past, participation of the present, and or responsibility to the future.”
Jeriel Chalk, Colorado, 2008

“Nature is our history, conservation is our future.”
Samuel Lambert, 11, Kentucky, 2013

“Our environment, our responsibility, our future.”
Christopher Voekel, age 8, New Mexico, 2009

“Conserving a habitat is like painting a background. Without it the picture is not complete.”
Max Cheng, age 15, California, 2014

“Wildlife speaks only the truth about our planet’s future, but our greatest challenge is learning to listen.”
Patrick Hull, age 14, Arizona, 2010

“Nature painted us the wetlands, but it is we who must conserve and appreciate the art.”
Sherry Xie, age 14, Virginia, 2015

USFWS JDSP “Examples of Conservation Messages” retrieved on 23 November 2015 from <http://www.fws.gov/migratorybirds/pdf/Education/junior-duck-stamp-conservation-program/ExampleConservationMessages.pdf>