



BIRDS

ADVENTURE IN LEARNING LESSON

Lesson Description: An animal class

This lesson focuses on observing spring birds in your area and using what you discover as inspiration for creative writing. After watching the video, participants will read a poem about birds and complete a set of questions about it. Next, keeping in mind what you noticed from the poem you studied, you will go outside and make your own observations of birds to inspire a poem of your own. The poem you write will be your nature journal entry for the week.

Guiding Question

How does creative writing help us appreciate birds and nature in a new way?

Concepts

1. Creative writing helps us build our understanding and appreciation of birds through detail and emotion.
2. Observing birds and reading/writing about them helps develop both an understanding of our ecological surroundings and creative writing skills.

Outcomes

Upon completion of this lesson the individual will be able to:

- Analyze literary devices and summarize the theme of a poem.
- Make written observations about birds in the local environment.
- Practice creative writing using local ecology as inspiration.
- Create a nature journal.

Minnesota Standards in Appendix

Watch Video or Read this Story

Spring bird story in the appendix.

Video address is <https://youtu.be/s21BCd6VafU>

BIRD STORY

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- Birds at the Wolf Ridge Feeders
- Characteristics of Birds
- Bird Banding and Migration
- Peregrines along the North Shore- Joined by visitors Jackie Falon of the midwest Peregrine Society and her peregrine, Gremlin!
- Bird Conservation at Home
- Nature Journaling

Birds at the Wolf Ridge Feeders

During filming Robby and Caroline saw black capped chickadees, downy woodpeckers, hairy woodpeckers, pine siskins, and dark eyed juncos.

Characteristics of Birds

feathers - This is the defining characteristic, since all birds have feathers (5000 to 12,000 per bird), and only birds have feathers.

flight - There are flightless birds: ostrich, emu, road runner, domestic turkeys, as well as extinct birds like the dodo, etc. There are other creatures that fly: many adult insects, and a mammal the bat. Privileges of flight include major migrations, diversity of habitats and adaptations.

scaly legs - Almost like a reptile's skin...snake for instance. Birds evolved from dinosaurs and are related to reptiles which we can see in their scaly legs.

hollow bones - Birds are designed to be as light as possible to help them fly, their bones are hollow to help them with this. This weight reduction trick doesn't hold true for flightless birds. Some diving birds, notably the loon, have solid bones to help them dive underwater.

lays eggs - Birds lay eggs, as opposed to mammals that give live birth. Eggs are laid by some other animals including amphibians such as frogs, reptiles such as the crocodile, many snakes, insects, and a couple of mammals (the echidna and the platypus).

sing songs - The nature of birds' vocal cords, allows them to make multiple sounds at one time, creating the wide variety of beautiful (and sometimes irksome) sounds that identify different species of birds.

beak, not teeth - Bird beaks look different depending on what they eat. For example, seed eaters will have big beaks to help them open seeds, meat eaters will have sharp curved beaks to help them rip flesh, and woodpeckers have long and strong beaks to tap into trees. Octopi and turtles also have a type of beak.

Bird Banding and Migration

Bird banding is a method whereby birds are caught unharmed, identified and recorded, tagged with identification bands around their legs, and released. As a research tool, it provides information about bird individuals, species and populations, including life spans, habitats, migration routes, and behaviors. Examples follow:

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- The mystery of where chimney swifts spent the winter was finally solved when a missionary visited an Indian village in Peru. The natives were wearing jewelry made from chimney swift bands.
- A ruddy turnstone (small shorebird) released in the Bering Sea was shot four days later in Hawaii, showing an average speed of 575 miles/day.
- Bird bands found in the stomachs of Florida alligators have come from herons, egrets, osprey, gulls, coots and pintails from as far away as Wisconsin, Ontario and the Northwest Territories of Canada.

For centuries, bird migration has been one of the biggest mysteries in nature. As birds left each year and reappeared the next, it was suggested that they hibernate in caves or buried in mud, that they were carried across the Mediterranean on the backs of larger birds, or that they flew to the moon.

Today, the mysteries of bird migration are being unraveled through research. Bird banding, population inventories, experimentation and radar data have added much to our knowledge. We know that many North American migrants travel to Central or South America, where the weather is warm in the winter, and more food is available. Why don't they stay down there? Perhaps the competition for food and space makes it difficult to raise a family. Apparently the longer summers, greater space and abundant food supplies of insects and seeds make the hazards of the long northern journey worthwhile.

How birds manage to reach their destination each year still fascinates us. So far we've discovered that birds use at least the following methods to migrate:

- **topographic features** - rivers, mountains, lakes, also the wind.
- **stars** - Indigo buntings in planetariums found the north star by observing the area of the night sky showing the least apparent motion.
- **sun** - Night time migrants use the setting sun to set a course.
- **earth's magnetic field** - small magnets taped on pigeon's back cause them to fly randomly.
- **odor** - short distance orientation back to nest site.

Wolf Ridge is situated right along a migratory pathway because Lake Superior is a large obstacle most birds choose to fly around rather than over. That brings many birds right to our doorstep! Including peregrine falcons.

Peregrines along the North Shore

For this segment, Joe travels down to Lake Superior where we know peregrine falcons have arrived to begin making their nests. He is joined by visitors Jackie Falon of the midwest Peregrine Society and her peregrine, Gremlin! Joe and Jackie find a mating pair of peregrine falcons at a traditional nesting site where birds have been present for many years. The north shore of Lake Superior has 25 known nesting sites, Palisade Head holds the record for the most wild produced peregrines out of any natural site in the upper midwest. There have been over 9,000 peregrines banded since the Midwest Peregrine Society began banding in 1981. Banding tells us where peregrines came from. For example, one peregrine that was recaptured in Duluth came from Lima Peru, 4300 miles away!

Peregrines can dive at around 240 miles an hour. They hunt by using their back toe and strike their prey at the base of the skull. This allows them to capture prey that is 8-10 times their size.

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Bird Conservation at Home

If you are interested in contributing to bird conservation at home, there are a few things you can do. You can add window clings to your window so birds don't fly into the window and hurt themselves. You can do this by cutting shapes out of paper or old calendars and hanging them up. There are also window decals you can purchase that are clear to the human eye, but birds can see them through UV rays.

If you ever find a bird that has a band on it, you can report it to scientists. By google searching "report a bird band," you will find the Bird Banding Laboratory website where you can report a band.

Nature Journaling

If you are going outside to observe birds, a great way to capture your observations is through a nature journal. A nature journal can be as simple as a few pieces of paper stapled together. You can capture drawings, writings, use water colors, colored pencils- whatever you'd like!

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Poetry Analysis

Poetry analysis worksheet is in the appendix.

POETRY ANALYSIS

In the poem below, the author explores her observations of birds and the thoughts and feelings that come from her observations. Read the poem and then answer the following questions about it.

The Little Nest

*A little picture haunts me;
It comes and comes again;
It is a tiny bird's-nest,
All ragged from the rain.*

*It clings within a birch-tree
Upon the moorland's edge,
Between the barren branches,
Above the swaying sedge.*

*The sky is gray behind it,
And when the north winds blow,
The birch-tree bends and shivers,
And tosses to and fro.
I wonder, does it haunt them,
The birds that flew away?
And will they come to seek it,
Some sunny summer day?*

*I wonder, does some redbreast
Upon an orange-bough,
Still picture it as plainly
As I can see it now?*

*Ah me! I would forget it,
Yet still, with sense of pain,
I see this little bird's-nest
Within the driving rain.*

By Evaleen Stein

Poem Source: <https://www.dltk-kids.com/crafts/weather/mstein-littlenest.htm>

Questions

Describe the setting of the poem using specific examples. Write at least three sentences.

Describe the speaker of the poem using examples. What are their thoughts and how are they feeling?

Summarize the main image of the poem. What is the speaker talking about?

In the seventh line of the poem the author uses the word "barren" to describe the trees. Using clues from the text, what might the word barren mean?

What is one of the themes of this poem? Remember, a theme is an idea that comes up over and over in a piece. Write at least 3 sentences explaining a theme you find.

This poem focuses on birds. What experiences from your life does the poem remind you of?

Observation and Nature Journaling

Observation and Nature Journaling worksheet is in the appendix.

OBSERVATION AND NATURE JOURNALING

Now that you have explored someone else's bird-inspired poetry, it's time to try it out yourself!

Observation
First, you'll need something to journal on. If you want some guidance, watch the video or read the video description for how to make a nature journal. Otherwise, a piece of paper and pencil will work fine.

Next, if you are able, go out into your backyard, or on a walk in your neighborhood to watch and listen for birds. You can record:

- the sounds you hear them make
- what they look like
- what they are doing
- how they make you feel

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Poetry writing

Now that you've gathered some notes for inspiration, it's time to write a poem about birds in your nature journal. Make sure you give the page a title and a date. Your poem can be whatever you want! It could:

- rhyme like the one you just read
- be something from your imagination
- be from a memory of birds
- include a drawing

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Appendix

Resources

Check out these websites below for more interesting information birds.

- <https://www.birds.cornell.edu/home/> - great website with info on bird ID, videos, research, and apps to use on your device
- <https://feederwatch.org/> - a citizen science bird watching survey that can be completed at home

MN Standards

4th grade English Language Arts standards

- 4.1.1.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
- 4.1.2.2 Determine a theme of a story, drama or poem from the details in the text; summarize the text
- 4.1.3.3 Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).
- 4.6.3.3 Write narratives and other creative texts to develop real or imagined experiences or events using effective

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technique, descriptive details, and clear event sequences.

- 4.6.10.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

5th Grade English Language Standards

- 5.6.3.3 Write narratives and other creative texts to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.
- 5.1.1.1 Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
- 5.1.2.2 Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.
- 5.1.4.4 Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes.

7th Grade Standards

- 7.4.1.1 Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
- 7.4.2.2 Determine a theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text.
- 7.7.3.3 Write narratives and other creative texts to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.

Worksheets

- Spring Birds Story
- Poetry Analysis
- Observation and Nature Journaling

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