

Right Outside Your Window Grades K-5

I. Introduction

- Introduce self-thank school for inviting out
- Outline what will be happening

Think about some of the plants and birds you might see outside your window-that window could be at your house, at your friends or relatives house, in your car or school bus

First I'd like to show you what I see when I look right outside my kitchen window.

Presenter Options:

- 1.) Play DVD--I have 2 DVD's 3-5 minutes in length – one which concentrates on springtime birds and one was made on birds observed in Nov – both of these were filmed in my backyard. In the DVD's the birds are predominately shown on bird feeders. There are some still photos of butterfly's, bee's, frogs, which are attracted to plants. Emphasize how bird, plants, insects, amphibians, mammals are all connected.
- 2.) Show bird/plant photos. I put together laminated bird photos with a picture of the bird on one side and the name and information about the bird on the reverse side. All of these birds can be found in Minnesota. I included those birds I've observed in my backyard. I have grouped them in folders according when you can see them in MN (migratory, non migratory - it is explained in the folder and coded on each photo on the lower right hand corner)

Ask kids: What did/do you see? Have you ever noticed these birds outside?

II. How many see birds when you look out a window?

- What makes a bird a bird?*****

Is it the pretty colors?

No – other animals, like fish and insects, come in all sorts of beautiful colors too

Is it the bill or beak?

No – other animals like the duck billed platypus have bills too

Is it the eggs?

No – other animals, like fish, amphibians, reptiles, insects and even some mammals, hatch from eggs as well

Is it the wings?

No – other animals, like insects (butterfly prop included) and some animals, have wings

Then what is it???

Feathers!! All birds have feathers: possessed by all birds but by no other living thing - if you see an animal that has feathers you can be sure it is a bird-

Birds have a lot of feathers!

The least amount of feathers a bird has is 940!

That bird is called the Ruby-throated hummingbird (which we saw in the video)

- What bird has the most feathers?

The Tundra Swan has >250,000

- Bald Eagle has 7,000

What are feathers used for? (I purchased some fake feathers to be used as props since we would need a permit to possess any part of a bird, including the feathers. You can also use Blue Jay prop to show feathers on a bird. Perhaps mention the different types of feathers on prop, soft downy feathers for warmth, flight feathers, tail feathers for steering)

- 1.) Flying - but not all birds fly (ostrich, penguin)
- 2.) Warmth: they use them like your winter coat-when you see birds all fluffed up in the winter they are trapping the warmth from their bodies with their feathers-this keeps them warm on the coldest of nights
- 3.) Keep Dry: feathers allow them to have a raincoat built right in
- 4.) Hide: Big word ask 3-5 graders if know camouflage

Show photo of red eastern screech owl surrounded by leaves and gray eastern screech owl in tree cavity: why want to hide?

Way to hide from predators and prey

Rouse Time!! Kids have been sitting for awhile so have them get up and rouse- rouse is an action that all birds do which involves raising all their feathers up so they look all fluffy and then shaking them out vigorously...it's usually a sign of contentment-when the kids are done rousing (and the presenter too!) have them sit down and transition into plants

III. How many of you see plants when you look out a window?*

- What are plants? Grasses, flowers, shrubs, trees.
- Show photos and parts of plants**(if available, presenter could gather some plants or parts of plants before the presentation to show the kids)
- Recognizing plants: Feel? Smell? Taste? Look?
- Stick to plants in the grocery for eating. Don't want to encourage kids to eat the plants they find outside.

How do you think plants and birds are connected?

- What do birds need in order to live? What do plants need? Same things you need. Clean air, water, food and the right place to successfully live***
- Birds need plants for:****
 1. Food
 - Examples: Seeds, Berries, Nectar, Foliage, Nuts, Fruits, Sap, Pollen
 - Props/Photos
 - ✚ Artificial branch with berries or grass with seed heads
 - ✚ Show bird photos emphasizing the connection between birds and plants
 - ✚ Bluebird and Cardinal on flowering shrub/tree perhaps looking for insects that are attracted to flowers and later in the year those flowers may turn to berries which the birds will eat
 - ✚ Goldfinch on sunflower looking for seeds

- 🚧 Goldfinch and Chickadee on flower head competing for the tasty seeds
- 🚧 Or any photo of birds pictured with plants

2. Cover: birds need places to find shelter from the weather and from predators
 - Examples: Evergreens Bramble Patch, Ground Cover, Log Pile, Dense Shrubs, Meadow/Prairie
 - Props/ photo:
 - 🚧 Cardinals in evergreen for protection from predators and weather
 - 🚧 Artificial evergreen branch
3. Places to Raise Young: birds need places in courtship behavior and to mate, and then to bear and raise their young
 - Examples: Mature Trees, Meadow/Prairie, Dead Trees/Snags, Dense Shrubs/Thicket
 - Show photo:
 - 🚧 Cardinal nest in shrub

IV. We discovered different ways you can identify plants using our senses of touch, smell, taste, vision but we didn't talk about our sense of hearing. In the video did you hear the birds?

Birds are known for the beautiful sounds they make.

- Play Identiflyer

1. American Robin: sings a long, fluted “sentence” composed of “words” of 2-3 syllables
2. Scarlet Tanager sounds like a robin with a sore throat-raspy and burry
3. Mourning Dove gets its name by the mournful sound of their call—many people mistake this for an owl call
4. Northern Cardinal's cheery whata-cheer-cheer-cheer territorial call in the spring
5. White-breasted Nuthatch yank-yank-yank means “I'm over here!”
Both males and females use this call to check in with each other
6. American Goldfinch calls “Po-ta-to-chip!” while flying
7. You could match up some of the bird photos with their calls too
 - By matching songs and descriptions, little by little the kids will figure out the ways we describe songs, which helps to develop listening skills

Or you could stick to owl sounds:

Tell kids you're going to play some bird sounds and one of them just might be an owl – raise hand when you think it is an owl making that sound – most kids think owls only make the hooting call of a great horned owl and are surprised to learn that owls sometimes sound like:

Horses-The Eastern Screech Owl

Big truck backing up- Northern Saw Whet Owl

Dog- Barred Owl

Women Screaming- Barn Owl

Some bird songs have a rhythm pattern that people have attached word phrases to-an example includes:

1. Barred Owl's call by the phrase, "Who cooks for you? Who cooks for you all?"

V. Did you notice plants are very important for birds? How? (food, shelter)
Is there one plant for one bird or do many plants provide food and/or shelter?
That's really cool how birds and plants are connected*****

You know what's even cooler? You are very important and are connected to plants and birds too. What are some ways you think you're connected? (plantings for birds, bird feeders, water sources)

What you do every day affects the world around you. (pick up trash, turn off lights, recycle, tell your friends and special adults how they can help too)

Action Plans:

- On their way home look out their car or bus window and see what birds and plants you can find – don't forget to look up!
- When you get home listen for any birds you might have in your neighborhood –
- Look around and see what plants might be there to provide food and/or shelter for the birds
- Teach others what you've learned
- In the spring/summer plant sunflowers or zinnia seeds

Books for Kids/Teachers:

Wild About Minnesota Birds: A Youth's Guide to the Birds of Minnesota
By Adele Porter

Roots, Shoots, Buckets & Boots: Gardening Together with Children (ages 4-8)
by Sharon Lovejoy

The Gardening Book (ages 4-8)
by Jane Bull

Landscaping for Wildlife
Minnesota Department of Natural Resources

Most of all Have Fun!!! If you have any questions, comments or concerns you can reach me at:
952 934-0280 Judy Moran

Science Standards

*Kindergarten :Strand IV Life Science, Sub-Strand G. Human Organism
Standard: The student will understand that people have five senses that can be used to learn about the environment

****Grade 1: Strand IV Life Science, Sub-Strand B. Organisms**
Standard: The student will observe plant and animal life cycles

*****Grade 1: Strand IV Life Science, Sub-Strand F. Flow of Matter and Energy** Standard: The student will understand that organisms have basic needs

******Grade 2: Strand IV Life Science, Sub-Strand C. Interdependence of Life** The student will observe and describe some features of plants and animals that allow them to live in specific environments

*******Grade 3: Strand IV. Life Science C. Interdependence of Life** the student will know that organisms interact with one another in various ways besides providing food. The student will know that changes in a habitat can be beneficial or harmful to an organism.

*******Grade 4: Strand IV. Life Science B. Diversity of Organisms** The student will classify plants and animals according to their physical characteristics. The student will learn that the characteristics used for grouping depend on the purpose of the grouping.

Included in the prop box for presentation:

The following handouts from the Cornell Lab of Ornithology website:

- ❖ Many different bird coloring pages
- ❖ Schoolyard tips for feeding birds
- ❖ Seed types
- ❖ Seed preferences
- ❖ 7 types of plants for bird habitat
- ❖ Landscaping for birds
- ❖ Bird feeding myths
- ❖ Bibliography on these topics:
 - Field Guides
 - Audio Guides
 - Videos and Software
 - Feeding/Landscaping
 - Professional Resources
 - Non-Fiction for Younger Audiences
 - Essays, Short Non-Fiction, Journals
 - Fiction
 - Bird Organizations
 - Bookstores

My intent for the above handouts is to keep the originals in the box and let the teacher decide if she/he would like to make copies or refer the Cornell website.

- ❖ “The Birds Around Us” poster
- ❖ Birds of Minnesota Field Guide by Stan Tekiela
- ❖ Wildflowers of Minnesota Field Guide by Stan Tekiela

- ❖ Identifier with 3 cards
- ❖ 40 laminated photos
- ❖ 2 DVD's
- ❖ Artificial Plant Material
- ❖ Bluejay
- ❖ Butterfly