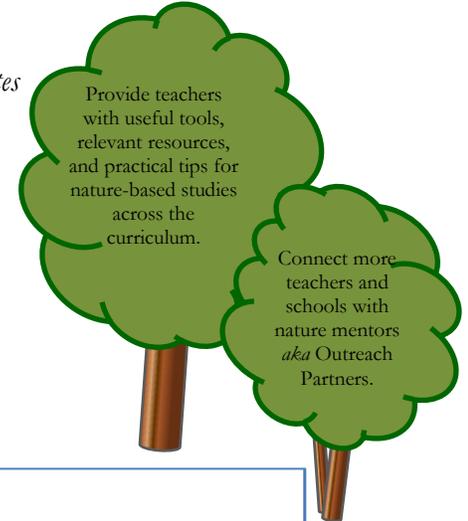




SCHOOLYARD NATURE NOTES

2nd Quarter, School Year 2014-2015

Welcome to the premiere issue of *4-H Schoolyard Nature Notes* with which we share news about nature education with school communities in York County and Poquoson.



FEATURED CITIZEN SCIENCE PROJECT

The Great Backyard Bird Count occurs each Presidents' Day weekend. The 2015 dates run from **13 to 16 February**.

It's easy to participate! Take your class outside to count birds in the schoolyard for a minimum of 15 minutes, and then report your findings. Need help with bird identification? Ask most students to watch for and count how many birds they see while one or two students take photos of each bird sighting. After the count period ends, pull up the photo(s) and have students try to ID the birds they spotted by using a field guide or going online with Cornell Lab's free **Merlin** app.

* It's okay if students can't ID all the birds they see, and if they don't spot **any** birds, that's important information to report. * Follow these links for details about the bird count and the bird ID app:

<http://gbbc.birdcount.org/about/>

<http://merlin.allaboutbirds.org/>

As we'll be helping schools improve their schoolyards to attract more birds this semester, participating in this Great Backyard Bird Count will help draw student attention to birds and get them thinking how they might improve the existing habitat to support resident and migratory birds.

BIRD OF THE QUARTER: NORTHERN CARDINAL



(Photos and excerpt from [Cornell Lab of Ornithology's All About Birds website](#))

“The male Northern Cardinal is perhaps responsible for getting more people to open up a field guide than any other bird. They're a perfect combination of familiarity, conspicuousness, and style: a shade of red you can't take your eyes off. Even the brown females sport a sharp crest and warm red accents. Cardinals don't migrate and they don't molt into a dull plumage, so they're still breathtaking in winter's snowy backyards. In summer, their sweet whistles are one of the first sounds of the morning.

Color Pattern. Male cardinals are brilliant red all over, with a reddish bill and black face immediately around the bill. Females are pale brown overall with warm reddish tinges in the wings, tail, and crest. They have the same black face and red-orange bill.

Behavior. Northern Cardinals tend to sit low in shrubs and trees or forage on or near the ground, often in pairs. They are common at bird feeders but may be inconspicuous away from them, at least until you learn their loud, metallic chip note.”

[More about cardinals online on the Cornell Lab of Ornithology's website.](#)

WHAT'S DIFFERENT IN THE WINTER?

Here's an article that explains why we don't see butterflies here during the winter.

<http://nativeplantwildlifegarden.com/it-is-cold-outside-where-did-all-the-butterflies-go/>

Here's another article that explains how various cold-blooded animals cope with winter.

<https://ypte.org.uk/factsheets/wildlife-in-winter-43b2568e-1e2b-49d9-998f-80de1bf5eebf/how-do-cold-blooded-animals-cope-in-the-winter#section>

In the winter, the once lush common milkweed in our schoolyard gardens is reduced to a mottled grey stalk, perhaps with empty dried seed pod covers clinging to the top of the stalk. It turns out that this die-off is a good thing! A study by the University of Georgia has shown that by dying back each winter, our native milkweeds prevent the protozoan parasite *Ophryocystis elektroscirrha*—most simply known as Oe—from surviving until spring and re-infecting and debilitating a new generation of monarchs. For more information about how you can check monarch butterflies for Oe as part of a citizen science project, check out this website: <http://www.monarchparasites.org/>

How else does the schoolyard change during the winter? Encourage students to keep a journal or create a phenology wheelscape (see link). http://uwarboretum.org/eps/research_act_classroom/Wheels/Wheelscapes%20-%20Enhancing%20a%20Sense%20of%20Place.pdf

SEASONAL SCHOOLYARD HABITAT NOTES

Don't "clean up" your schoolyard habitat just yet!!! Resist the temptation to cut down the dried brown plant stalks or rake up the leaves in your schoolyard habitat until at least early March. Those standing stalks and fallen leaves provide wildlife with food and cover—seeds that feed the birds, beneficial insect eggs and pupa that overwinter in stems and under fallen leaves, and camouflage for small birds and insects hiding from predators.

Keep water features and bird feeders clean and stocked! Even though it may be too cold for mosquitoes to breed, it's still important to continue to refresh water sources and birdseed so that birds stay healthy throughout the winter.

Take stock of the schoolyard from a bird's perspective. Bird feeders may help, but many birds eat only natural food sources. It is in our power to create a more inviting habitat for birds that live here year-round and migratory birds that pass through.

<http://www.pubs.ext.vt.edu/HORT/HORT-59/HORT-59-PDF.pdf>

Here are five shrubs in particular that are sure to attract birds to your schoolyard:

<http://content.yardmap.org/learn/great-berries-great-birds/?region=northeast>

Your school might consider offering birds a bird bath, roosting box, or nesting material.

<http://www.allaboutbirds.org/page.aspx?pid=1144>

SEASONAL OUTDOOR ACTIVITIES

Take students out on a winter nature walk. In just 15 minutes outside, students can take a temperature, listen for birds and squirrel chatter, check trees for nests, and look for signs of animal life. A sample winter scavenger hunt is attached to challenge the observation skills of students of all ages.

No bird feeders? Make simple pine cone feeders or hang orange slices from a tree.

<http://www.birds.cornell.edu/citsci/take-action/2014/11/easy-to-make-pinecone-bird-feeders/>

Here are five things you can do or discuss to help migrating birds. Share your new knowledge with others!

<http://www.birds.cornell.edu/citsci/take-action/2014/09/the-one-thing-you-can-do-to-help-migrants/>

MOMENT OF ZEN

For inspiration about nature in general, check out this series of celebrity-narrated film clips, "Nature is Speaking."

<http://natureisspeaking.org/home.html#Films>

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Schoolyard Nature Notes is produced by VCE-York/Poquoson's Schoolyard Habitats Outreach for our YCSD and PCPS public school communities. The newsletter is delivered electronically via email with one hard copy delivered to each school. The appearance of external hyperlinks does not constitute endorsement by Virginia Cooperative Extension of the linked web sites, or the information, products, or services contained therein. Unless otherwise specified, VCE does not exercise any editorial control over the information you find at these locations. All links are provided with the intent of helping teachers increase and improve nature-based education delivered to K-12 students during school hours. Please let us know about any external links that are broken or that you believe are inappropriate.

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Name: _____

Date: _____

Time: _____



I-Spy Winter Wonder

Bundle up for a winter walk in the schoolyard. Bring a journal and pencil and make notes as you go. Walk as quietly as a fox. 🦊

At the beginning of our walk, the temperature is _____. The sky is _____.

What I hear and smell: _____.

While walking along the edge of the forest around the schoolyard, we saw... *(Check box of any item seen on your walk.)*

Plants & Plant Parts!

- Large hole in a tree *(Who might use this hole? Why?)*
- Tree trunk with many small holes in one section *(What creature might have made these holes? Why make holes?)*
- Acorn with cap *(Does your acorn have any holes in it? What might eat acorns besides squirrels?)*
- Dried seedhead *(Are any seeds still inside? If not, what may have happened to them?)*
- Fallen pine cone, partially gnawed *(What's eating it? Why?)*
- Shrub with berries *(Are the berries plump or have they started to shrivel? What might eat them?)*
- Shrub with broad waxy green leaves *(Why do you think the leaves are thick and waxy?)*
- Tree with needles *(Are there still needles on the tree? Pick up a needle from the ground. How many needles to each little clump?)*
- Tree that has lost all of its leaves *(Why do you think its leaves fall off each winter?)*
- Tree still holding onto some leaves *(When do you think the rest of these leaves may finally fall off the tree? Why?)*
- Tree with buds on its twigs *(When do you think the buds might open? What might be inside?)*
- Snag *(Dead tree, now used by various wildlife for homes and food)*
- Mistletoe plant up in a tree *(Does the mistletoe lose its leaves in the winter? How does it get food and water?)*
- Carpet of moss *(Why a carpet? Moss doesn't have roots, so how do you think it gets its water?)*

Fungi!

- Mushroom or other fungi *(What color is it? What size? Is it a single specimen or a group?)*

Animals or Evidence of Animals!

- Bird *(Is the bird alone? Is it making any noise? Do you know what kind of bird it is?)*
- Squirrel *(Is the squirrel alone? What is it doing? Is it making any noise?)*
- Rabbit *(Did it hop away from you? Did you see it before it started hopping?)*
- Turtle, lizard, or other reptile? *(Where do you think reptiles go in the winter? What are they doing?)*
- Frog, toad, or other amphibian? *(What do you think amphibians do during the coldest months of the year?)*
- Animal tracks *(Guess what animal made the tracks. Where do you think it might have been going?)*
- Scat *(Animal droppings. Naturalists can identify the animal by its scat. Scientists learn many things by analyzing scat.)*
- Feather *(Leave the feather where you found it. What color is it? How long is it? Is there just one or several?)*
- Spiderweb *(Leave a spiderweb as you first found it. Do you see the spider? A spider egg case? Is there anything caught in the web?)*
- Cocoon, chrysalis, or an egg case. *(Some insects overwinter in pupal form. If you found one, make a guess when it might emerge.)*
- Decomposer *(Do you think these creatures keep working throughout the winter? What might happen if the ground freezes?)*

Features Added by People

- Water feature *(Is there water in it? Is it frozen?)*
- Bird feeder *(Is it clean and full of fresh bird food?)*
- Bird house *(Does it have a nest inside? Is it clean?)*

Some Other Things Seen, Beyond What is on This List