



SCHOOLYARD NATURE NOTES

Second Quarter, School Year 2016-2017, Issue 8

Sharing news and resources for outdoor nature-based education with K-12 school communities in York County and Poquoson.

Outreach Mission:
Help school communities re-connect with nature.

Newsletter Goals:
Highlight top-rated science- and nature-based lessons, programs, citizen science, and service projects. Share nature news among schools.

Connect teachers and schools with nature mentors aka Outreach Partners.

Outreach Goal:
Provide teachers with useful tools, relevant resources, and practical tips for nature-based studies across the curriculum.



What's Eclosing at Our Schools?



▲ **Grafton Bethel ES** ► LEGO Team made lots of meadow mudballs chock full of native seeds collected from their schoolyard habitat.



► In late August, **Dare ES** students went back to school early for a habitat workday and exploration.



Dare ES



▼ In October, **Seaford ES** Monarch Club members spied a chrysalis hanging from their garden bench. They then planted bare roots of common milkweed along the gym wall for a new milkweed patch for 2017!



Tabb ES monarch butterfly release





BIRD OF THE QUARTER: American Goldfinch

(Bird photos and written passages excerpted directly from Cornell Lab of Ornithology's informative [All About Birds](http://www.allaboutbirds.org) website.)



“This handsome little finch, the state bird of New Jersey, Iowa, and Washington, is welcome and common at feeders, where it takes primarily sunflower and nyjer. Goldfinches often flock with Pine Siskins and Common Redpolls. Spring males are

Color Pattern. Adult males in spring and early summer are bright yellow with black forehead, black wings with white markings, and white patches both above and beneath the tail. Adult females are duller yellow beneath, olive above. Winter birds are drab, unstreaked brown, with blackish wings and two pale wingbars.

Behavior. These are active and acrobatic little finches that cling to weeds and seed socks, and sometimes mill about in large numbers at feeders or on the ground beneath them. Goldfinches fly with a bouncy, undulating pattern and often call in flight, drawing attention to themselves.

Habitat. The goldfinch’s main natural habitats are weedy fields and floodplains, where plants such as thistles and asters are common. They’re also found in cultivated areas, roadsides, orchards, and backyards. American Goldfinches can be found at feeders any time of year, but most abundantly during winter.”



brilliant yellow and shiny black with a bit of white. Females and all winter birds are more dull but identifiable by their conical bill; pointed, notched tail; wingbars; and lack of streaking. During molts they look bizarrely patchy.

Size & Shape.

A small finch with a short, conical bill and a small, head, long wings, and short, notched tail.



Links to more information about the American Goldfinch:

https://www.allaboutbirds.org/guide/American_Goldfinch/lifehistory

https://www.allaboutbirds.org/guide/American_Goldfinch/sounds

Nestwatch: <http://nestwatch.org/learn/focal-species/american-goldfinch/>

Attracting goldfinches:

<http://www.birdsandblooms.com/birding/attracting-birds/plants-and-trees-that-attract-birds/attract-goldfinches-garden/>

Additional Resources:

http://www.biokids.umich.edu/critters/Carduelis_tristis/

<http://www.audubon.org/field-guide/bird/american-goldfinch>

<http://animals.nationalgeographic.com/animals/birding/american-goldfinch/>

Taxonomy of the American Goldfinch

Kingdom:	Animalia	(Animals)
Subphylum:	Vertebrata	(Vertebrates)
Class:	Aves	(Birds)
Order:	Passeriformes	(Perching Birds)
Family:	Fringillidae	(Finches, Grosbeaks, Honeycreepers, Canaries, Roselins, +)
Genus:	Spinus	(Siskins, Serins, Goldfinches)
Species:	<i>Spinus tristis</i>	(Linnaeus, 1758)

↻ Late Fall and Winter Habitat Stewardship ↻

Traditional horticultural advice recommends a garden clean-up in preparation for winter. What is the recommendation for a wildlife habitat area?

Allow the habitat to retain the plant stalks, both fallen and standing, as they dry up and turn brown and gray. Dried stalks, seedheads, and other organic matter provide crucial food and cover for birds and insects over the winter. Hold off on removing this organic material from the habitat until March brings a renewed flush of growth. Have students search for evidence of wildlife activity in the habitat over the winter. It might be plant galls (abnormal growths on leaves and stems), pupae cases, chrysalises, cocoons, tracks, and scat (animal poop). How do insects survive over winter?

<http://bugguide.net/node/view/163372>

https://www.si.edu/Encyclopedia_SI/nmnh/buginfo/winter.htm

Clean and fill water features over the winter.

Nothing attracts birds like a source of water for drinking and bathing. Clean and refill the water feature in your habitat once or twice weekly. Generally, mosquitoes die or become inactive at temperatures under 50° F. But birds stay active through the winter and will intrigue observers with their visits to a clean source of water.

Scope out possible spots to add a bird roost box.

While birds are generally not nesting in our area in the middle of winter, birds may gather in a roost box.

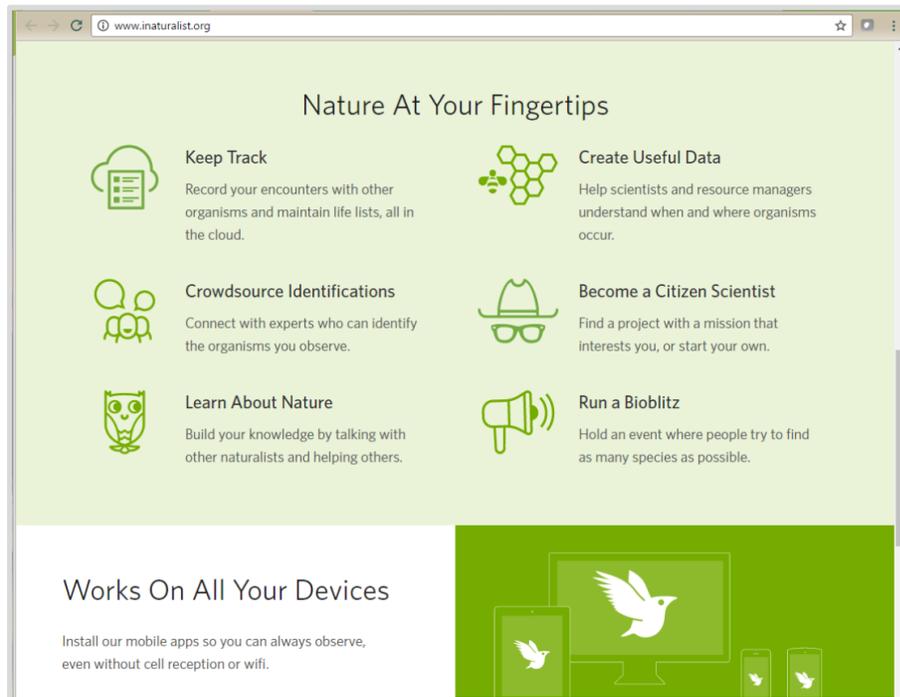
<https://www.allaboutbirds.org/attract-birds-with-roost-boxes/>

Mulch. Weeds are often fewer where mulch is present. Weeds are also easier to pull when they grow through a layer of mulch. If your habitat did not get a blanket of new mulch this fall, it is not too late to mulch. This is a super stewardship activity for students of all ages.

FEATURED CITIZEN SCIENCE PROJECT

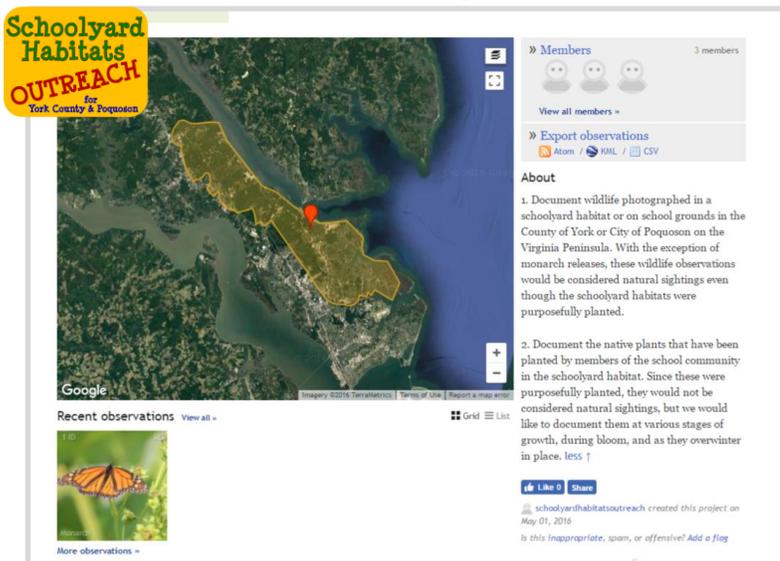
iNaturalist.org

provides the means for connecting with nature while also contributing to an international research database of photographic observations from the natural world.



- Build a field guide to your schoolyard habitat.
- Document schoolyard phenology, i.e., when plants emerge, bloom, set seed or fruit, and fade.
- Compare data collected using the same protocols across teams, classrooms, or even schools.

Within iNaturalist.org, you may select a specific project. We've set up a project called **757 York Poquoson Schoolyard Habitats** with which we need your help. To look up this project, click on the PROJECTS tab at the top of the website and simply search on **757**. Our project will pop up. Note that you may add one of your observations to more than one project.



Another iNaturalist.org project to investigate is **Virginia Wildlife Mapping** by the Virginia Department of Game and Inland Fisheries.

“Wildlife Mapping is an effort by the Virginia Department of Game and Inland Fisheries and the Virginia Master Naturalist to catalog the wildlife found in Virginia. This is an open project and can be used to report wildlife observations in Virginia.

The purpose of this project is to better understand the distribution of wildlife in Virginia with a special emphasis on species of greatest conservation need. For more information on SGCN and Virginia’s Wildlife Action Plan, visit: <http://www.bewildvirginia.org/>.”

Observations reported to iNaturalist.org **must include a photo**. If you cannot identify the plant or animal in the photo, it may be submitted as *unknown*. In this event, another user may make an identification. Once an identification is made, an iNaturalist curator will review the entry. If approved, your entry will be considered **research grade**, and it will be added to the growing iNaturalist.org database.

Tabb Public Library's New Native Plant Habitat

The Tabb Public Library now has a native plant habitat in the corner of the raised garden bed in front of the building. This was a result of an Eagle Scout project by David Lee (photo top right). Each of the nine species in the plot has a plant identification marker listing both the common name and botanical name. Our group supplied many of the native plants that David chose to plant in the space. The habitat also includes an olla, which is a clay pot that assists with watering needs (photo, below right). Library staff members are now maintaining the habitat.

<http://permaculturenews.org/2010/09/16/ollas-unglazed-clay-pots-for-garden-irrigation/>

Looking good!

Photos of project in progress.



Nature Learning Across the Curriculum!

Children are naturally curious. Nature-based learning embraces science but extends well beyond. Serving as a nature mentor does not mean you can identify every plant and animal and soil in the schoolyard. What is more important than identifying individual species is for youth to observe ecological processes, patterns, and cycles. What IS important is to provide K-12 regular exposure to the outdoors, to give them time to explore and conduct field investigations (science, math), to wonder, ponder, and give critical thought to the challenges that face wildlife and people (language arts, social sciences), and to reflect on what they see (language arts, fine arts). To help illustrate the various curriculum connections, we developed a series of topic sheets, distributed with this newsletter.

Links to Nature FAQs, Lessons, and Activities

Leaf Activities for Young Learners, Project Learning Tree
Nest Boxes, a.k.a. Birdhouses, Habitat Network
Bird Sleuth K-12 resources, Cornell Lab of Ornithology
Learn About Pollinators, Pollinator Partnership

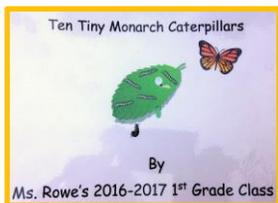
<https://www.plt.org/educator-tips/leaf-activities-young-learners/>
<http://content.yardmap.org/learn/nestboxes/>
<http://www.birdsleuth.org/free-resources/>
<http://www.pollinator.org/education#cr>

Fine Arts Celebrating Nature

Seaford ES: Seasons of an apple tree



Tabb ES: Spiderweb stained glass watercolors



BMES Monarch Booklet

In Jenna Rowe's First Grade class at **Bethel Manor ES**, students made a monarch storybook.



Congratulations to Student Teams for Being Animal Allies!

Student teams from Tabb MS, Grafton Bethel ES, and Seaford ES competed in the regional FirstLEGO League competition at Crittenden MS in Newport News on 8 November 2016. Tabb MS placed first in its division, and Grafton Bethel placed second in its division, which sends both teams to the state competition in December. Seaford ES garnered the Judges' Award. GOOD LUCK!!! For more information, here is the full press release:

<http://yorkcountyschools.org/aboutUs/pressRoom/news/view.asp?ID=1705>



TED ED: LESSONS WORTH SHARING

What if Everyone Jumped at the Same Time? (7:13)

<http://ed.ted.com/featured/no2r3IZW>

Bats, and why they deserve a hero's welcome—and our protection.

<https://ed.ted.com/lessons/i-m-batman-amy-wray>

The Threat of Invasive Species (4:46)

<https://ed.ted.com/lessons/the-threat-of-invasive-species-jennifer-klos>

Can Plants Talk to Each Other? (4:38)

<https://ed.ted.com/lessons/can-plants-talk-to-each-other-richard-karban>



Cool Nature Books Available at York County Public Libraries

How to Raise a Wild Child: The Art and Science of Falling in Love with Nature, by Scott D. Sampson

Bringing Nature Home, by Doug Tallamy

Native Plants of the Southeast, by Larry Mellichamp

Attracting Native Pollinators, The Xerces Society Guide

Sibley Bird East: Field Guide to Birds of Eastern North America, by David Sibley

Flight Behavior: A Novel, by Barbara Kingsolver



PICTURE BOOKS

Summer Birds: The Butterflies of Maria Merian, by Margarita Engle

Me, Jane, by Patrick McDonnell

If You Hopped Like a Frog, by David M. Schwartz

Owl Moon, by Jane Yolen

4-H SCHOOLYARD NATURE NOTES

4-H Schoolyard Nature Notes is produced expressly for YCSD and PCPS communities by VCE-York/Poquoson's **4-H Schoolyard Habitats Outreach** volunteers. The newsletter is distributed each quarter of the school year via email to principals. Submissions from schools are welcome and encouraged!

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 inform us if any external links are broken or found to be inappropriate.

4-H Schoolyard Habitats Outreach

Barbara Dunbar, Program Director, rebarb71@gmail.com
Master Gardener & Virginia Master Naturalist 757-880-8875

Jody Turner, Outreach Partner Coordinator, Newsletter Editor
Master Gardener, 757-867-1135, jodybynature@gmail.com



4-H SLOGAN: Learn By Doing



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