WINTER 2016
EDUCATORS
NEWSLETTER

IN THIS ISSUE:

Monarch Butterflies
Educators Workshop

Professional Development at the Preserve

Register Today for Winter Programs

Inspiring Ideas for the Classroom

Walking trails are open to the public every day from dawn to dusk.

Bunker Interpretive Center (BIC) hours

Academic year:
M–F 9 a.m.–5 p.m.

Summer:
M–F 8:30 a.m.–4:30 p.m.

Closed weekends and

MONARCH BUTTERFLIES
EDUCATORS WORKSHOP

This spring, monarch butterflies from Mexico begin their annual 2,000 mile migration to the U.S. and Canada. The powerful story of the monarch butterfly inspired the emergence of the Monarch Teacher Network in 2001 and its Canadian partners in 2003. This summer, an exciting opportunity for teachers is coming to South Haven, MI. Teaching and Learning With Monarch Butterflies is a two-day teacher workshop combining classroom and field experiences. It enables pre-K through 12th grade educators to teach essential skills in literacy, math, science, geography, technology, Spanish, the arts and social studies ... all through the captivating story of monarchs. Teachers complete the workshop with all the materials they need to bring this exciting and dynamic subject into their classrooms.

Workshops are taught by a team of experienced classroom teachers and educators. Participants are provided with the knowledge, skills, materials and confidence to raise monarchs in the classroom, and create an outstanding learning experience for their students.

Each participant receives:

- Hands-on instruction by experienced teachers
- Rearing cages
- Books, posters, DVDs and other essential materials
holidays.
Admission to the trails and BIC is free.
1750 East Beltline Ave. SE
Grand Rapids, MI 49546
calvin.edu/go/preserve
(616) 526-7600

- Strategies for butterfly gardens and “Monarch Parades”
- Inquiry-based science activities for all abilities
- Activities for Mexican/pre-Hispanic culture, history and Spanish language
- Activities for language arts, math, social studies, drama, and fine arts
- Distance learning projects with schools in Canada/Mexico/California
- Proven models for engaging community support
- Post-workshop ongoing support

You will find more information in the Monarch Teacher Network flyer.

back to top

PROFESSIONAL DEVELOPMENT AT THE PRESERVE

A group of National Heritage Academy Young 5 teachers participated in a Growing Up WILD workshop here at the preserve last week. They spent an inspiring inservice day acquiring new skills in effectively using the outdoors as a teaching resource. Through hands-on demonstrations of interactive activities, the group gained the experience and confidence needed to integrate the interdisciplinary curriculum into their teaching. Comments from the workshop include:

"Loved this class! Engaging, hands-on, practical - excellent ideas!"

"I would highly suggest others take this course. Jeanette (facilitator) was engaging and knows her stuff."
As you make your professional development plans for next year, consider an environmental education workshop at the preserve! If you like the "Inspiring Ideas" in this edition of our newsletter, you'll love the award-winning Flying WILD workshop; it will have your students celebrating migratory birds through hands-on field investigation, involving language arts, social science, math, and even service learning. For more information about all the workshops we offer, click here.

REGISTER TODAY FOR WINTER PROGRAMS

During the winter, we offer our Critters in the Cold program for grades Pre-K to 6th. This hands-on program allows students to learn more about how animals cope with the cold through one of the following methods: hibernation, migration, dormancy, or remaining active. It provides opportunities for the students to observe animals and/or signs of these animals in the preserve, and to discuss various adaptations that active animals use to survive Michigan winters. The program takes place both outside in the preserve and in the Bunker Interpretive Center. Winter programs run February 8 - 26. Programs are 90 minutes in length, and cost $3 per student. Currently, National Heritage Academy schools are eligible to attend our programs free of charge, thanks to a funding grant.

For more information visit our website, or contact Julie Wilbourn to register your class. To register, we will need your name and school, grade level, number of students and adults, preferred dates/times, and the best way to contact you.
Like our programs? Tell others about us! Feel free to forward this e-mail to your colleagues, and spread the word that the best way to learn about the natural world is by spending time in it.

back to top

INSPIRING IDEAS FOR THE CLASSROOM

Each newsletter, we will share with you some of our favorite ways to get students outside learning about the natural environment. You do not need to have forests or fields surrounding your school; school yards can work just as well for experiential learning. Our school yard activities are hands-on, require few supplies, and are easily adaptable to meet your students’ needs. We will also share with you some of our favorite storybooks, art projects, and other resources to enhance learning in the classroom. Additional ideas and photos of art projects and storybooks can be found on our Pinterest page.

BIRDING

Wherever we are, there is a constant reminder of the natural world in which we live - birds! As we look forward to the Great Backyard Bird Count during February 12-15, we offer you ways to incorporate birding into your classroom activities this winter and spring. With trees bare of leaves in winter and migration occurring in spring, these two seasons are excellent times for observing and identifying wild birds in your school yard or nearby park. Below are some resources to help you get started birding with your students.

LEARN ABOUT BIRDS

All About Birds: If you are new to birding, check out this website managed by the Cornell Lab of Ornithology, an international leader in the study and conservation of birds. From a section on birding basics to an extensive online identification guide (complete with recordings of songs and
calls), it contains everything you need to get started.

**Merlin Bird ID**: This free app for your smart device helps students identify birds they observe 'in the field'. It was created by the Cornell Lab of Ornithology, and is simple to use — just tell it where & when you saw the bird, then choose generally what it looked like and what it was doing from a list of options. Merlin will provide a short list of photos for the bird you most likely saw, based on the day and location. Once you find a match, you can instantly learn more about the species.

**Bird Sleuth**: Studying birds is an accessible and fun way to bring real science to students. From making observations and asking questions, to collecting data and publishing results, BirdSleuth creates practicing scientists with resources that engage youth in their own investigations. It is designed by the Cornell Lab of Ornithology, specifically for teachers and home school parents to use in the classroom. Educators purchase reasonably priced kits to get started.

**CREATE A FEEDING STATION**

A feeding station is a sure way to spot birds, especially when you can’t get outside. Birds feed regularly during winter and spring because they are burning extra calories to maintain their body temperature and migrate long distances. While your students are learning to ID species, have them take video of the activity around the feeder; it will help to be able to pause and replay images and sounds of bird calls.

**Top 10 feeder birds you'll very likely see in Michigan during winter**: Black-capped Chickadee, Downy Woodpecker, White-breasted Nuthatch, American Goldfinch, Dark-eyed Junco, Mourning Dove, Blue Jay, Northern Cardinal, Red-bellied Woodpecker, and Tufted Titmouse.

**Top feeds for these birds**: Primarily black oil sunflower seed and sunflower chips, also safflower, suet, shelled peanuts, and striped sunflower seed, followed by Nyjer thistle.

**Choose a feeder**: Different types of feeders combined with different types of feed will attract different bird species. Using a hanging tube feeder with a tray filled with black oil sunflower seed, and a hanging wire cage feeder filled with suet
should attract the top 10 birds named above.

Make a tube feeder: Punch holes on either side and near the bottom of a plastic pop bottle. Slide a twig or wooden spoon all the way through the holes, leaving the ends protruding on either side of the bottle for perches. Make another dime-sized hole just above each perch for the birds to pull the seeds out. Tie twine around the top and hang the bottle. Fill using a paper funnel.

Make a suet feeder: Save the plastic mesh bag when you buy produce at the grocery. Just put a suet cake in it, and tie the top with twine.

A few more feeder tips:

- Placement of the feeder: Ideally, the feeder will be 3 ft. from a window (close enough for students to see, and helps protect the birds from window collisions), and within 10-12 ft. of shrubbery (helps the birds feel safe by providing cover from predators).

- Make it low maintenance: Use feed with shelled seeds (no clean up) and sterile thistle (won’t germinate) found at garden supply stores.

- Avoid avian disease: Clean the feeders once a month with a mixture of warm soapy water and a capful or two of household bleach.

- Deter squirrels: If you use a narrow pole to hang a feeder, place a baffle on the pole (a smooth metal sleeve or cone that prevents climbing). The most effective feeders tip, or have perches that close the feeder, when something as heavy as a squirrel sits on it.

Provide water: Birds need water to drink and to clean their feathers for optimal health, waterproofing, insulation and efficient flight. Therefore, they are as attracted to water as
they are food. Some birds prefer ground baths and some prefer pedestal or hanging baths, so if possible provide baths at both heights. Using a shallow container, fill it about 1 inch deep with water, and place a flat stone in it for perching. Place the bath nearby a feeder and shrubbery, but in an open area that will allow the birds to spot predators.

**PARTICIPATE IN A BIRD COUNT**

No single scientist or team of scientists could hope to document and understand the complex distribution and movements of the 10,000 bird species around the world. Participating in a bird count is a great way to involve your students in a global project that helps scientists in real-time! Students are motivated when they understand their data is meaningful to scientists investigating far-reaching questions, such as: how the weather affects bird populations, why some populations fluctuate greatly each year, how disease affects birds in different regions, and how diversity varies by urban and natural locations. During a count, you can explore what others are seeing in your area or around the world. Enjoy the images pouring in from across the globe, and share your own bird photos online.

![Map of Project FeederWatch locations](image)

**Project FeederWatch** is a winter-long survey of birds that visit feeders at backyards, school yards, nature centers, community areas, and other areas in North America. Participants periodically count the birds they see at their feeders from November through early April and send their counts to Project FeederWatch. This data helps scientists track broad scale movements and long-term trends of winter bird populations. There is a small fee to participate in this Cornell Lab of Ornithology project.
The Great Backyard Bird Count was the first online citizen-science project to collect data on wild birds and to display results in near real-time. Since then, people of all ages and walks of life have joined the count each February to create an annual snapshot of the distribution and abundance of birds. To participate, simply tally the numbers and kinds of birds you see in any location for 15 minutes on one day of the count. In 2015, Great Backyard Bird Count participants in more than 100 countries broke the record by counting 5,090 species of birds on more than 147,000 checklists! This tool is free of charge.

**BONUS:** Teachers are invited to a [free webinar](#) on the evening of February 4th: “Great Backyard Bird Count for Educators.”

**eBird.** Here at the preserve, we keep a journal and record the date that we see each bird species return in spring, as well as their breeding behavior. If you want to keep track of all of your spring bird sightings like we do, sign up for an eBird account. eBird is a real-time, online checklist program that allows you to record and track your sightings, and also see what other birders are observing in your area. As a bonus, your observations (combined with others in the international network of eBird users) are shared with a global community of educators, land managers, ornithologists, and conservation biologists working to conserve birds. [Click here](#) for more information about using eBird with students. This tool is free to use.