

PROJECT NATURE NEWSLETTER

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APRIL, 2019 ISSUE

Events



Wildflower Wander

Blendon Ravines (5280 Cambria Way, Westerville)

6th April 2:00 pm - 3:00 pm

Take a 1.5-mile off-trail hike in the new Blendon Ravines park property in search of spring wildflowers

Weekly Bird Hike

Scioto Audobon Metro Park - Grange Insurance Audobon Center

6th, 13th, 20th, 27th April 10:00 am - 11:30 am

Hike with experienced birders to find and learn about birds (Binoculars and field guides can be provided)

Composting Display

Battelle Darby Creek Metro Park - Nature Center

6th - 20th April 9:00 am - 7:00 pm

Stop by and view an interactive display about composting. Learn how you can help the environment by composting at your own home!

Bison

Battelle Darby Creek Metro Park - Nature Center

6th April 6:00 pm - 7:00 pm

Not a cow, not a buffalo, it's a bison! Join for a 1-mile hike and learn about this 2,000 lb mammal

Nature School: Wildflowers

Blacklick Woods Metro Park - Nature Center

7th April 2:00 pm - 3:00 pm

Learn tips and tricks for identifying different types of wildflowers

Spring Birds: Waterfowl

Blendon Woods Metro Park - Nature Center

7th April 9:00 am - 10:00 am

Enjoy an early morning hike to Thoreau Lake for some great waterfowl watching

Eagle Walk

Highbanks Metro Park - Oak Coves Picnic Area

7th March 2:00 pm - 4:00 pm

Hike 3-miles and look for Bald Eagles in their nest

Fungus Display

Blacklick Woods Metro Park - Nature Center

13th - 14th April 8:00 am - 8:00 pm

Learn what fungus can be found at Blacklick Woods, as well as some history and uses for this diverse group

Uses of Plants

Blendon Woods Metro Park - Nature Center

13th April 2:00 pm - 3:00 pm

Learn how Native Americans used various plants on this 2-mile hike

Earth Day Cleanup

Blendon Woods Metro Park - Nature Center

13th April 10:00 am - 11:00 am

Sharon Woods Metro Park - Schrock Lake Picnic Shelter

13th April 2:00 pm - 3:00 pm

Help pull invasive plants and pick up litter on- and off-trail. Register at www.earthdaycolumbus.org

Amethysts of the Sky

Gallant Farm Preservation Park

13th April 10:00 am - 3:00 pm

Watch the Purple Martins return and entertain with their aerial acrobatics and delightful song

Osprey Homecoming

Hogback Ridge Preservation Park

14th April 1:00 pm - 4:00 pm

Watch the ospreys return to Alum Creek Reservoir through spotting scopes

Frog Frenzy

Three Creeks Metro Park - Confluence Area

13th April 8:00 pm - 9:30 pm

Bring a flashlight and wading shoes to search for frogs in the ponds and listen to their mating calls

Stop, Hummer Time

Blacklick Woods Metro Park - Nature Center

14th April 2:00 pm - 3:00 pm

Learn about the life history of hummingbirds, as well as tips to attract them to your yard

Events



Wildflower Hike

Blendon Woods Metro Park - Nature Center

14th April 2:00 pm - 3:00 pm

Take a 2-mile walk to see beautiful blooms

Coffee and Composting

Battelle Darby Creek Metro Park - Nature Center

14th April 1:00 pm - 2:00 pm

Join for a cup o' Joe while you learn about the process of composting and the different ways that you can set up your own composting system

Fairy, Elf and Bug Houses

Sharon Woods Metro Park - Natural Play Area

14th April 2:00 pm - 3:00 pm

Help us pull invasive plants and gather natural items to build a house for your favorite forest creature

Egg Display

Blendon Woods Metro Park - Nature Center

17th - 21st April 1:00 pm - 4:00 pm

Explore the stunning array of bird egg sizes and colors

Wildflower Walk

Inniswood Gardens Metro Park - Gardens Entrance

20th April 2:00 pm - 3:00 pm

Identify and discuss some common wildflowers on a walk with an educator

Tree ID Display

Blacklick Woods Metro Park - Nature Center

27th - 28th April 8:00 am - 8:00 pm

Come out to learn about some of our common trees and how to identify them

Planet-Palooza

Blacklick Woods Metro Park - Nature Center

27th April 12:00 pm - 4:00 pm

Celebrate Earth Day with this FREE family friendly events like creeking, exploring vernal pool, etc, featuring many environmental organizations!

Spring Bird Walk

Emily Traphagen Preservation Park

27th April 8:00 am - 9:30 am

Take a walk in the parks as spring returns bringing many migratory birds. All skill levels; loaner binoculars available

Save the Frogs Weekend

Deer Haven Preservation Park

27th April 12:30 pm - 4:30 pm

Frogs are in trouble around the world. Over 200 species have gone extinct since 2000, and thousands more species are on the verge of disappearing. Learn how you can help save frogs near and far, meet Ohio native frogs and learn more about them. Jump into the wetland to catch tadpoles

Wild Edibles

Battelle Darby Creek Metro Park - Nature Center

27th April 11:00 am - 12:00 pm

Learn how to identify wild edible plants and how you can create some delicious dishes with them

Spring Wildflower Walk

Blacklick Woods Metro Park - Nature Center

28th April 2:00 pm - 3:00 pm

Take a 1-mile walk to search the forest for spring blooms

Wildlife Search

Battelle Darby Creek Metro Park - Indian Ridge

28th April 1:00 pm - 2:00 pm

Use radio telemetry to find a wild animal that we have been tracking through the park

Backcountry Birding

Clear Creek Metro Park - Park Office

28th April 8:30 am - 10:30 am

Look and listen for spring migrants on a 2-mile backcountry hike

Bird Migration



Migrating flock of Tundra Swan. Photo Credit: Tyler Ficker, OSU Ornithology Club

It's Spring and we'll soon have our summer avian visitors return! One doesn't need to be a serious birder to notice that there are far fewer birds in the winter. Where do they disappear in the winter? They migrate to other places! Bird migration is described as the regular, recurrent, seasonal movement of bird populations from one geographic location to another and back again.

When we think of bird migration, we often picture the majestic sight of migrating geese flocked in a V-shape. But geese are only one of the many species of birds that migrate. Of the more than 650 species of North American breeding birds, over half are migratory!

In Ohio, during migration seasons, we get lots of birds that are just passing by on their journey further north to their breeding grounds during spring or when they are retreating south in the fall to their wintering grounds, although many would stay in Ohio. Several of these birds travel from as far as Central or South America! Some species of birds such as the American Tree Sparrow, Dark-eyed Junco, White-throated Sparrow, etc visit us in the winter from up north and spend their winter in Ohio. Apparently, Ohio winter appears to be (relatively) favorable to them. Go figure!

Why Do Birds Migrate?

Birds usually migrate to move from areas with depleting resources to a more favorable region, mainly in terms of food supply and nesting locations. In the Northern Hemisphere, birds tend to migrate north in the spring to take advantage of increasing insect populations and abundant budding plants that they feed on. Additionally, longer days allow the birds to have a larger clutch size and raise more young. As winter sets in, these migratory birds retreat south to their wintering grounds. These advantages offset the high stress, physical exertion costs, and other risks of

migration. In the southern hemisphere the directions are reversed, but there is less land area in the far south to support long-distance migration.

Several species of birds are well-adapted to survive through the cold winter months and are able to find sufficient food. They stay in the same region year-round and do not migrate. In central Ohio, examples of such birds are Northern Cardinal, Carolina Chickadee, Tufted Titmouse, etc. Some species might or might not migrate depending on the particular population and the year. This kind of migration is called **partial migration**. American Robin is an example of a species that undergoes partial migration. In other words, each year different populations of the American Robin decide whether or not to migrate!

The mechanisms triggering migration are complex and vary across species. Migration could be triggered by a combination of several factors such as change in day-length, temperature, food supply and also a predisposition embedded in their genes through several thousand years of evolution. People who have kept migratory birds in cages, have noticed them getting restless in the spring and fall, repeatedly fluttering toward a specific side of the cage. German behavioral scientists gave this behavior the name *zugunruhe*, meaning migratory restlessness.

Bird migration is not limited to birds that can fly. Most species of penguin migrate by swimming. These routes can cover over 600 miles. Dusky grouse perform altitudinal migration mostly by walking. Emus in Australia have been observed to undertake long-distance movements on foot during droughts.

Evolution of Long-distance Migration

While short-distance migration is mostly driven by a very simple search for food, the reason for long-distance migration is more complex and has evolved over thousands of years. Through several generations, the tropical ancestors of these long-distance migratory birds gradually dispersed northward from their breeding region in the tropics for reasons such as seasonal abundance of food, increased day-length, and other factors. During the periods of glacial retreat, they kept advancing north for better breeding grounds in the winter, but continued to return to their winter homes in the tropics. This theory is supported by the fact that most



Black-throated Green Warbler
Photo Credit: Tyler Ficker, OSU Ornithology Club

long-distance migratory species of North America like the **warblers, tanagers, flycatchers**, etc have evolved from the species that originated in the tropics.

Navigation

Birds may be genetically programmed with navigational skills. First-year migratory birds often make their very first migration on their own; yet they are somehow able to find their winter homes despite having never seen it before, sometimes thousands of miles away, and then return the following spring to the place where they were born! Birds combine several different types of senses to navigate. It has been demonstrated that birds can get compass information from the sun, stars and constellations, and even by sensing earth's magnetic field. They are also able to use landmarks seen during the day.



Tundra Swans

Photo Credit: Tyler Ficker, OSU Ornithology Club

Migration Routes

Just like we take interstate highways to travel long distances, migratory birds also take similar "highways" called **flyways**. In North American continent, there are 4 such flyways - **Atlantic Flyway, Pacific Flyway, Central Flyway** and the **Mississippi Flyway**. Here in Ohio, we are at the eastern edge of the Mississippi Flyway. Waterfowl, shorebirds, and cranes migrating north and south follow these preferred narrow routes more or less strictly for both the spring and fall migrations. However, land birds like the songbirds, which are less tied to a single habitat, use these routes but are more spread out. A single population of migrants may be scattered over a vast territory so as to form a broad front hundreds of miles in width. They take a different route for the spring migration than when returning to their wintering grounds in the fall, making a clockwise elliptical migration loop, to take advantage of not only better seasonal food resource but also of stronger tailwinds in the spring but weaker headwinds in the fall.

If Geese Migrate, How Come I See Them Year-Round?

The geese that we see in Ohio in the winter aren't the same population of geese that are here in the summer. The summer population of geese in Ohio migrates south in the winter. The ones we see in the winter are visiting from north. In addition to Canada geese, there are several other species of birds that are migratory, yet we see them year-round because another population of that species would visit from the north in the winter. Examples of such species include Blue Jay, American Robin, and Song Sparrow.

Irruption

An irruption is a dramatic, irregular migration of large numbers of birds to areas where they aren't typically found, possibly at a great distance from their normal ranges. Sometimes circumstances such as a good breeding season followed by a food source failure the following year lead to irruptions in which large numbers of a species move far beyond the normal range.



Snowy Owl
Photo Credit: Tyler Ficker, OSU Ornithology Club

Several factors can lead to irruptive years for different birds. The most common cause is a lack of food in the birds' normal wintering grounds. Birds that feed on the seeds and catkins of birch, maple, pine, spruce and hemlock trees often irrupt when those types of trees have poor seed crops. Different birds of prey may also irrupt when the seed crops are poor and cannot support the necessary rodent populations for raptor food sources. Other causes for bird irruptions include unduly harsh cold or severe weather that may force birds to find more temperate wintering grounds, or overbreeding that may deplete even plentiful food supplies. When several

species irrupt to the same region in one year, it is referred to as a **superflight**. Common irruptive species in Ohio include Red-breasted nuthatch, Evening Grosbeak, Snowy Owl, Pine siskin, Red crossbill and Rough-legged hawk among others.

Molt Migration

Sometimes in late summer waterfowl might be seen migrating in the "wrong" direction. Waterfowl like Canada Geese raise their young near water, where the goslings can feed and, if necessary, dive or swim away to escape predators. In late summer, the adults temporarily become flightless for several weeks as they molt their wing feathers. During this time both the young who haven't yet learned to fly as well as the adults that are flightless while they molt their feathers are extremely vulnerable. Individuals may move several hundred miles to large bodies of water where they will be safer as they molt their wing feathers. This is molt migration and could be in any direction that offers safer grounds for these waterfowl. Molt migration happens in late summer, much before the greater annual southward migration.



Northern Pintail
Photo Credit: Tyler Ficker, OSU Ornithology Club

Migrant Traps

Some places, because of their geographical placement, local weather conditions, abundance of food source or local topography, attract an unusually high number of birds. Such places where migrating birds concentrate are referred to as migrant traps and often become birding hotspots. In Ohio, there are several such places like the Killdeer Plains Wildlife Area, Metzger Marsh Wildlife Area, Ottawa National Wildlife Refuge, Sheldon Marsh State Nature Preserve, Headlands Beach State Park, etc. But one site that has gained legendary status and has become a world-famous birding hotspot is the **Magee Marsh State Wildlife Area**. It is one of the few remnants of the Great Black Swamp - a 40-mile wide and 120-mile long wetland that once extended from the shores of Lake Erie deep into northwestern part of Ohio and northeast Indiana, before it was drained for agriculture and other development projects in the 19th Century. Magee Marsh attracts visitors from over 22 countries every year - both experienced birders as well as amateurs. Due to the local topography and geographical placement, the migrating birds are “funneled” through this narrow region and hence concentrate in a small area. There are over 300 species of birds seen at Magee Marsh, most of them passing through along their migration route.

Hazards and Threats

Undertaking such an arduous and stupendous feat of traveling thousands of miles is full of hazards such as storms and bad weather, food shortage, and predators who have a relatively easy time hunting a prey at a stopover site along the migrating route where there is a high concentration of birds. But these are all natural hazards and the way nature works to maintain ecological balance! The more severe and serious threat that these impressive creatures face is from us humans and our civilization.

One major threat to these migrating birds comes from collision with tall skyscrapers in cities. Most land birds migrate at night. Guided in part by the constellations, they are attracted to the bright lights in the tall buildings left on overnight, causing them to collide. During the day, windows deceive migratory birds. They cannot see the pane of glass. Instead, the birds focus on the reflection of trees or sky, or see through the glass to a potted plant inside the building. The result is often a fatal collision. An estimated 1 to 10 birds die per building, per year. Across North America, the estimated number of migrating birds killed annually in collisions with buildings ranges from 100 million to 1 billion birds, mostly at night since most land birds migrate at night.

There are several efforts being undertaken to raise awareness about this rapidly increasing threat. A major effort in Toronto, Canada, called the **Fatal Light Awareness Program (FLAP)**, was the first to raise awareness about the hazard that lights in high-rise buildings pose to the birds, starting in

1993. The program is aimed at getting the lights in buildings turned out at night. In 1999, Audubon and partners established the first **Lights Out** program in Chicago. The Lights Out Chicago program reported an 80% reduction in collisions at a building following a reduction in nighttime lighting. Since then, several groups all across the US have come together in an international, collaborative effort to save migrating birds by initiating similar Lights Out programs in their areas. In Ohio, the Ohio Bird Conservative Initiative (OBCI) organizes the Ohio Lights Out program. In Columbus, OBCI partnered with the Grange Insurance Audubon Center, Columbus Audubon, the Ohio Wildlife Center, the Columbus Zoo and other local organizations to establish **Lights Out Columbus**. Since the program started in 2012, there are now over 20 buildings in the city of Columbus that participate in the program to save the migrating birds!

You can join and contribute to the Lights Out program as a volunteer for collision monitoring. Students at OSU Ornithology Club began monitoring campus in 2018. During migrations season, volunteers and club members take a walk around buildings early at dawn to search for any fallen birds. Injured birds are taken to the Ohio Wildlife Center and the deceased ones to the OSU Museum of Biological Diversity. To join or for more information, email osubirds@gmail.com.

Additionally, Ohio Wildlife Center is coordinating a downtown Columbus collision monitoring program for spring 2019. For more information, email the volunteer coordinator at educationsupport@ohiowildlifecenter.org

Wind farms are increasingly becoming another serious risk to migrating birds. Collision with the turbine blade is mostly fatal for the birds. US Fish and Wildlife Service estimates that bird deaths from turbine collisions are between 140,000 and 500,000 birds per year. As wind energy capacity increases under the DOE's mandate (a six-fold increase from current levels), statistical models predict that mean bird deaths resulting in collisions with turbines could reach 1.4 million birds/year.

While there are several potential solutions being explored to minimize these collisions, unfortunately so far none has been proven to be effective. Ensuring proper siting for new wind turbine facilities is the first step in minimizing bird-turbine collision risk, i.e. wind farms be located away from the migratory routes or other habitats that attract large number of birds. The US Fish and Wildlife Service is exploring a standard, scientifically supported method for proper siting.

The **Migratory Bird Treaty Act (MBTA)** is America's most important bird protection law. Passed in 1918, the Act protects nearly all of our country's native birds. The MBTA is credited with saving numerous species from extinction, such as the Snowy Egret, Wood Duck, and Sandhill Crane!

There are several locations in Central Ohio to check out the migratory birds. O'Shaughnessy Reservoir, Alum Creek Lake and Hoover Reservoir are good spots for seeing waterfowl and some other birds. Green Lawn Cemetery is a birding hotspot in Columbus attracting lots of birds in the migration season including some rare and uncommon birds. OSU wetlands and Glen Echo ravine also attract lots of migratory birds. Metro Parks and other nature parks around the city offer a great site to spot birds. Several bird walk public programs are organized by these parks during the migration seasons. Check out these programs in the Events section and enjoy finding these beautiful little creatures!



Baltimore Oriole
Photo Credit: Tyler Ficker, OSU Ornithology Club



Cape May Warbler
Photo Credit: Tyler Ficker, OSU Ornithology Club

Fun Facts

- Hudsonian Godwits may fly 8,000 miles nonstop between breeding and wintering areas, unless brief stopovers are made at as-yet-undiscovered spots somewhere in South America.
- Blackpoll Warblers cross thousands of miles of open ocean weighing only 16 grams – the weight of two quarters.
- The tiny Ruby-throated Hummingbirds fly across the Gulf of Mexico
- Known as the feistiest of all hummingbirds, the Rufous Hummingbirds make one of the longest migratory journeys of any bird as measured by body size, traveling from breeding grounds as far north as Alaska to wintering grounds in Mexico.