



Middle Creek in Motion

Spring 2024

2024 Spring Waterfowl Migration – End of Season Recap

In the Winter 2023 edition of *Middle Creek in Motion*, we gave you a closer look at what you could expect for the 2024 waterfowl migration season. You may have noticed we shied away from an actual prediction and that is because waterfowl migration is hard to give accurate predictions for. A range of dates is usually best.

We had a mild winter with occasional snow coverage and below freezing temperatures that didn't last for long periods of time. Because of this, the snow goose numbers here never hit over 100,000 like we have come to know in the past. Essentially, because snow and ice are limited on the landscape, snow geese (and other migratory waterfowl) can migrate without long drawn out stops at any given location.

Before the migration even really began this year, many snow geese were reported in the Lehigh Valley area and in central New Jersey. These birds most likely never went south past Pennsylvania because the weather and, therefore, food and roosting availability didn't require them to. Fast forward after a few snow events and freezing temperatures, birds pushed into Chesapeake Bay or southern New Jersey. But the snow and freezing temperatures receded quickly in Pennsylvania.

Meanwhile in New York, much of the area was not covered in snow for a large portion of the winter. When the snow melted in Pennsylvania, much of New York near the Finger Lakes was snow free as well. Snow geese that stopped at Middle Creek to refuel had another destination not far away that would meet their needs, so they kept going after a few days. Because of this, we never saw those large peak numbers that we had become accustomed to. Peak numbers this year for snow geese were around 70,000 birds which occurred on February 24 and 25. Additionally, tundra swans peaked at 575 on February 6.

We got a lot of questions this migration season if snow goose populations are declining and if it's a negative thing if they are. Research from Université Laval in Quebec, Canada really took a closer look at how populations have changed over time and how recently, snow goose numbers have fallen to within target ranges that biologists believe are environmentally stable. In the last two decades, populations for the greater snow goose had peaked at over 1 million birds twice. Data suggests that target populations should be 500,000-750,000 birds. While snow geese are a game species (meaning they can be hunted to help manage populations), data also suggests that food availability, especially in breeding and staging areas, is a major cause for the decrease in populations. This is nature's way of limiting a species population based on "carrying capacity".

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Photo by April Olson

Important Reminders!

Now that we're back in the swing of things, with the crowds of people (and snow geese) at lower levels, it's time to talk about some important upcoming events.

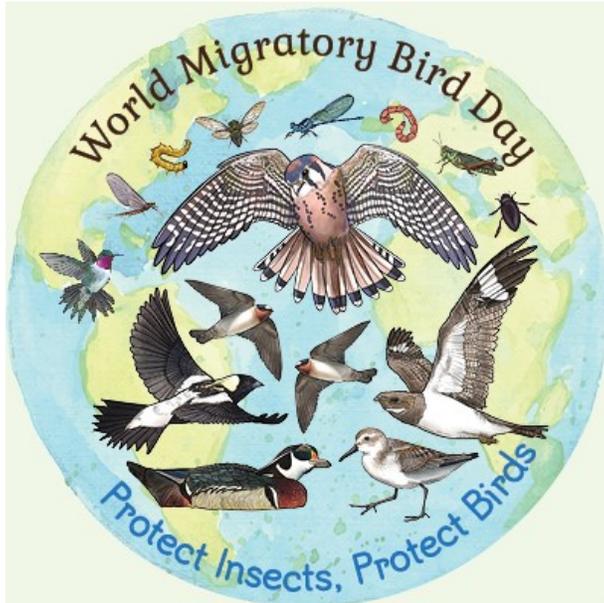
New for 2024, we're giving hosting a World Migratory Bird Day celebration a shot. This event will be on Saturday, May 11th from 10 AM - 2 PM at the Visitors Center and will feature many different groups highlighting bird migration (more on Page 2).

Additionally, if you've been looking at getting involved as a volunteer, but don't know what all it involves, or aren't available on weekdays, we are having a spring volunteer day at Middle Creek on Saturday, April 13th starting at 10:00 AM. Come dressed for outdoor work!



New Event at Middle Creek: World Migratory Bird Day

What started in 1993 as International Migratory Bird Day, under the auspice of the Smithsonian Migratory Bird Center, was later named, as it is known as today as World Migratory Bird Day. This day was designed to highlight bird migration and conservation around the world, in addition to the wonders of, and threats to, the epic journeys carried out by birds each year. In fact, World Migratory Bird Day is actually a twice-a-year event. Why? Well, because many species of migrating birds do it twice, once in the spring and again in the fall.



However, here at Middle Creek, we are looking to celebrate this event in the spring, on Saturday, May 11th.

As we continue to plan this new event for the first time, we are looking to include many educational and conservation groups that can educate on and promote bird conservation. Whether local birding groups, research institutions, conservation organizations, or native plant landscapers, we hope to have a diverse selection of people to make it worth one's while to come check out and learn more.

The event will be from 10 AM - 2 PM at and around the Visitors Center. More information will be posted on our Facebook Page and at the Visitors Center soon. We hope to see you, and if the event is successful, it will hopefully join the Wildlife Art Show, National Hunting and Fishing Day, and the Wild Goose Chase as beloved annual events.

The (Good) Fires of Middle Creek

CATUTION: PRESCRIBED BURN AHEAD! Temperatures in the spring begin to slowly heat up, and so does fire season. Many plants are still dormant, but conditions are usually ripe for fire. This allows the Game Commission to safely conduct fires on the landscapes to the benefit of many species.

Middle Creek, compared to many Game Lands, has lots of early successional habitats like fields. Fields often dry out before the woods and are thus one of the first habitat types that can be burned in the spring. They also have lots of fuels, like wildflowers and grasses, that allow fire to be carried more easily.

As you visit Middle Creek in the spring, look to the skies for smoke columns. It most likely signifies that Game Commission staff are burning. We also typically post an advanced warning of burns on our Facebook page. If you're really lucky, you can sometimes spot fires from the road and can observe the Game Commission doing their work.

If you really want an intimate view of a prescribed fire, Middle Creek hosts a prescribed fire demonstration at the Visitors Center each spring as part of the Outdoor Explorer Series. Game Commission staff are on hand at this event with equipment such as engines, drones, and drip torches, to show how fire is safely done, and then they actually puts on the fire.



Middle Creek's Final Waterfowl Controlled Hunt Summaries

by Brian Collett

January brought an end to waterfowl hunting at Middle Creek for the 2023-24 season. This year we hunted 23 days which is an increase from just 16 in the 2022-2023 season. In all, 921 hunters spent time in either a goose (497) or duck blinds (424) and fired a total of 2,360 rounds of ammunition. For the season, 23% of all hunters harvested either a goose or a duck.

The duck harvest of 219 was up from the previous year (163) but with the additional hunting days the season success rate remained very similar for the duck blinds at about 40%. The harvest consisted of mallard (85), American black duck (67), American green-winged teal (39), northern pintail (9), northern shoveler (6), gadwall (6), ruddy duck (3), hooded merganser (3) and lesser scaup (1). It's interesting to note that we had no northern pintails harvested in 2022-23. We had heard that their population had seen an increase coming into this year and the improvement in the pintail harvest mirrored that.



As for Canada geese, the season was a little slower than previous years. Hunters successfully harvested 96 geese for the year which put the success rate at around 11%. Only 4 of those birds were identified by weight as Atlantic population migrants. We didn't have any snow geese harvested this season. Last year, hunters managed to harvest 9. While snow geese were reported in the area, we didn't see any significant numbers until February this year.

Hunters can place applications for goose blinds on

huntfish.pa.gov in June until the end of August. No-show goose blinds and duck blinds are drawn throughout the season for each hunting day. Information about waterfowl hunting at Middle Creek as well as other special hunting opportunities can be found by visiting our webpage or by calling the Visitor Center at 717-733-1512.

Habitat management in action: A lot of work goes on in the off season that makes for better hunting opportunities come fall. If you have ever seen the lower water levels in the main lake and smaller impoundments here at Middle Creek, you are seeing an important management activity for waterfowl called drawdowns. The lower water levels are achieved with water control structures. Exposing the soil in the bodies of water allows for vegetative growth that will then be flooded once water levels return to normal. This provides an important food source for waterfowl and can have a positive effect on hunting. Duck blind 4 provided a great example of this last season. Improvements to the water control structures on the impoundment allowed for the water levels to be manipulated throughout the summer months allowing for drawn down water levels and excellent vegetative growth on the exposed soil. The results were seen this past season when duck blind 4 stood out as one of our best blinds. The previous year it had been the worst.

Editor's note: a HUGE thank you to all who offered their photographs for this newsletter. There were many submissions and far too little space!



Killdeer are a unique species of plover found in coastal wetlands and beaches. However, come breeding season, they can be found in all sorts of habitats, such as open fields with sparse vegetation, or in more developed places like old parking lots or even rooftops. They are well known for their misleading behavior of acting like they are injured, sticking one wing out and calling to distract would-be predators away from their nest. It becomes humorous when they come out of seemingly nowhere to try and distract a person who had no intention of looking for their nest in the first place.

Photo by Deborah Moehlmann

Spring peepers are often a sign of spring, but, like many herps, they can be active well before that, even when there is still ice on the water. The wood frog, imaged here to the right, is one of many species common frog to our vernal pools at Middle Creek. One would be surprised to see their egg masses not long after they start calling. If you're exploring a vernal pool, one difference to observe between toads and frogs are that frog eggs are laid in masses while toad eggs are laid in strings. Vernal pools are very sensitive habitats, so be sure to explore with care and tread lightly!



Photo by Jonna Godwin



Although they can be seen throughout the year, eastern bluebirds will begin hanging around perspective nesting locations in the late winter. A little keen observation is needed to see a bright blue flash fly from a bluebird box as one passes by. Middle Creek has a robust volunteer program to monitor and collect data from our 268 bluebird boxes. If you're interested in joining the team and are able to commit a day to checking on your assigned boxes once every week or two throughout the growing season, we always need more help! You can stop in at the Visitors Center for more information and to fill out a volunteer form.

Photo by Joe Caulfield

Law Enforcement Notes from the Controlled and Propagation Area

The enforcement of Pa. 34 C.S., otherwise known as The Game and Wildlife Code, is tasked to State Game Wardens of the Pennsylvania Game Commission. Within and around Middle Creek Wildlife Management Area (MCWMA), there are thousands of acres of State Game Lands that a variety of recreational activities are engaged in.

MCWMA encompasses two counties and five townships and is the hub of the 5 different police agencies that have jurisdiction of those townships. As a result, there is little traditional police coverage and therefore the PGC State Game Wardens in the area conduct patrols and investigate violations of the Game and Wildlife Code, as well as Title 18, the Crimes Code.

In recent weeks, there have been unlawful activity related to PGC regulations. In several cases, individuals have made unlawful entry into the Controlled Hunting Area adjacent to the tour road known as the Wildlife Drive. Citations have been filed for the unlawful entry that compromises resting waterfowl or disturbs other species, specifically nesting bald eagles.

In another incident, a visitor noticed mud dripping from a 4WD vehicle that had driven on top of one of the large rocks in a SGL parking lot. The registration was noted and further investigation revealed that the individual was previously cited for 'mudding' on game lands. The investigation involved the discovery of his exact tire tread impressions in two areas that are off limits to vehicular travel. Tire tread depth, width, and track width matched the suspect's vehicle. When contacted and presented with the evidence, he admitted to the violations and was cited for the most recent incidents.

A hearty thank you to the individual who made the report as without it the prosecution would likely not have been possible. Please report any and all violations witnessed immediately to the PGC Dispatch Center at 833-742-4868. Be a good witness and photograph vehicles, and registrations and write down other pertinent information (such as date and time). Remember, think safety and do not approach or speak to violators.

Big Island Habitat Work

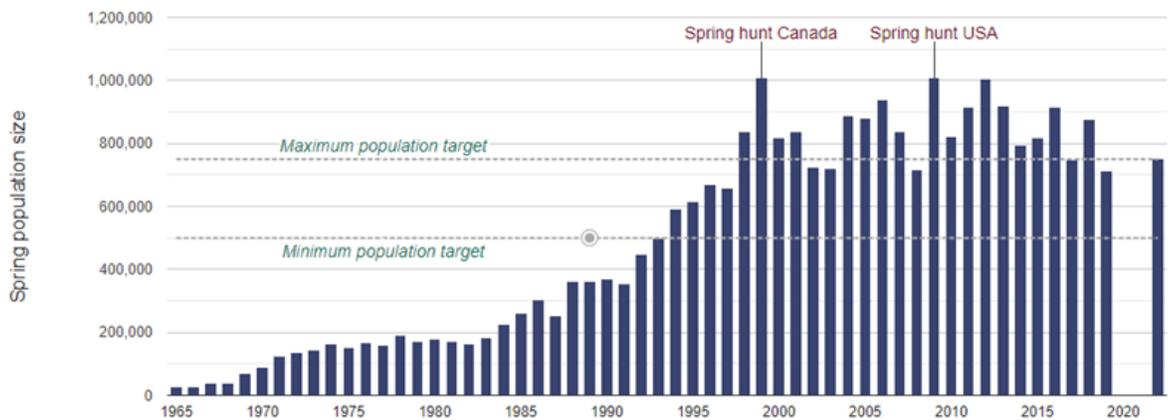
Late fall and early winter, the habitat crews at Middle Creek began working on the "Big Island" in the middle of the main lake. This island serves as one of the primary nesting locations for Canada geese on the property. Overtime woody vegetation started to take over the edges and parts or the interior which hinders nesting. While the lake was still drawn down, the crews were able to access the edge of the island and remove non-native invasive shrubs such as autumn olive and some native trees like red maple and black willow.

In recent years, we've also noticed an increase of goldenrod, which is native, but a grassy composition with more diversity of wildflowers would be preferred. This upcoming season we plan on mowing and potentially using prescribed fire in the fall on this area in an attempt to reduce the amount of goldenrod to better create a mosaic structure to be used by a multitude of wildlife species. The island is surveyed every year for goose nests and we've noticed a slight decline in overall nesting on the island. While there are multiple factors that could contribute to their slight decline, we believe a change in plant composition and reduction of woody plants will help improve desired conditions while also improving it for other wildlife species. Hopefully we begin to see an uptick in nesting on the island in the coming years.



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If you are interested in learning more about the ins and outs of greater snow geese and their populations, check out Université Laval's website here: <https://bylot.cen.ulaval.ca/en/animalgoose.php>



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Until next year...

Conservation Heritage Museum Paver Path - Waiting for the First Blooms

At the very end of last fall, our new paver path that wraps around the new Conservation Heritage Museum addition to the Visitors Center was completed. Due to some unfortunate timing, the native plants were put in the ground during one of the numerous dry spells we had last year. We nursed the new plants with a hose as much as possible! So, this spring we will be patiently waiting to see what survived.

Already, some plants have been showing good signs of life. One of them, foxglove beardtongue (*Penstemon digitalis*), has been putting out strong growth in its basal leaves, meaning it has healthy root development. Other trees, such as eastern redbud (*Cercis canadensis*), already has some flower buds looking like they are ready for warmer temperatures. Eastern redbuds are unique in that they bloom along their branches before leafing out. They are actually a member of the legume (Fabaceae) family.



Buds of eastern redbud (*Cercis canadensis*).

If anything was lost in the heat of the late summer/early fall, we will be looking to find some suitable natives to replace them. As plants grow in and compete for space, hopefully the paver path will be a another lush area of growth around the Visitors Center serving as small, but important habitat for birds, mammals, insects, and more.

As always, if you are ever interested in helping to volunteer in our native plant gardens, you can always stop by the Visitors Center to get more information on how to do so. Additionally, the pavers placed along the paver path can still be ordered and dedicated. There are brochures that can be filled out at the Visitors Center with payment information.

The curly basal leaves of foxglove beardtongue (*Penstemon digitalis*) usually persist, and even grow slowly, during the dormant season.

Upcoming Events at Middle Creek

March 19th - June 20th

Wednesday, April 10th at 6:30 PM in the Auditorium: Taking the Pulse: How We Study Arctic Raptors

This presentation will review recent results from Hawk Mountain Sanctuary's research program, with an emphasis on snowy owls and rough-legged hawks. The audience will witness how we manage to monitor those highly mobile and unpredictable predatory birds throughout consecutive years via a slide show depicting field work situations.

Saturday, April 20th at 10:00 AM: Monitoring Avian Productivity and Survivorship (MAPS) – An Up-Close Look at Bird Banding Research

Join Game Commission staff as they explain the process of bird banding using mist-nets and how Middle Creek is contributing to a nationwide research database called M.A.P.S. Trained and permitted staff will discuss and demonstrate how they catch, band, and measure birds while explaining how this data can help conserve birds and their habitats for the future. The live bird banding demonstration will allow participants to see the action up close, weather permitting.

Saturday, April 13th at 10:00 AM: Spring Volunteer Day

Come out for some "spring cleaning" at Middle Creek! Work will include working on our trails, in our native plant gardens, and general cleanup. Meet at the Visitors Center and come dressed for outdoor work!

Wednesday, May 8th at 6:30 PM in the Auditorium: Wildlife Health in Pennsylvania: Why it's Important and How You Can Help

You've probably seen a mangy fox, but have you ever wondered how it got that way and what will happen to it? We'll discuss some of the common problems affecting wildlife and how they are connected to the health of our pets and ourselves. We'll also discuss what you should do when you encounter a sick, injured, or even dead wild animal, and how to help us better monitor wildlife and keep them healthy for future generations to enjoy.

Saturday, May 11th from 10:00 AM - 2:00 PM: World Migratory Bird Day

A new event for Middle Creek, come learn about the wonders, and perils, of bird migration. Multiple organizations will be on hand to share the stories, research, and conservation of bird migration, from local birding groups, research institutions, native plant landscapers, and conservation organizations.

Saturday, May 18th at 10:30 AM: Wetland Wander

Take a walk through Middle Creek's wetlands, learn about their ecology, and why they are important. During the walk we will identify common wetland plants, look at wetland soils, and look for signs of wildlife. Be ready to get your hands dirty while learning how wetlands contribute to a healthy ecosystem. Please wear rubber boots or shoes if you have them. Dress appropriately for going into wet and muddy areas.

Saturday, June 8th at 8:00 AM: Birds, Blooms, and Butterflies

Join the Quittapahilla Audubon Society on a guided hike to seek out the splendors of early summer. This hike will start at the Visitors Center and seek out what is currently in bloom, what is flying by; both in terms of birds and insects. The important ecological relationships between these species will also be investigated.

Wednesday, June 12th at 6:30 PM in the Auditorium: Old Field Restoration and the Return of the Northern Bobwhite Quail

Old field habitat was once prevalent across Pennsylvania. It is made up of a mix of grasses, forbs and shrubs that benefit a host of native species including the northern bobwhite quail. The Game Commission has been working diligently to return this habitat and species to the Commonwealth.