



# Middle Creek in Motion

## Spring 2023

### *Spring Migration Wrap-up*

In the last edition of *Middle Creek in Motion*, we attempted to predict what would happen this winter for the annual snow goose migration. As with most predictions involving weather or wildlife, we weren't quite right.

So were the snow geese "early" to Middle Creek or did they just push south later than usual, technically making them "late" in terms of their migration? One thing is for sure, snow geese arriving in December in large numbers at Middle Creek IS usually unprecedented. What is more unusual is for their numbers to peak before February even arrived.

This year, the peak of the migration was lower than it had been in previous years topping off at roughly 79,000 birds. Tundra swans and Canada geese were also lower than average topping out at 1,900 and 1,950, respectively.

So why were the birds early (or late) and why did they not hit historical high numbers? Its probably due to multiple factors. Migration fluctuations change yearly based on weather conditions. This year, after a cold snap around Christmas, we had a pretty mild winter where the Middle Creek lake was mostly unfrozen and our fields and the surrounding agricultural areas were never covered with snow. This allowed the migration of both snow geese, Canada geese, and tundra swans to occur earlier at Middle Creek than what has happened historically. All three migrating species want to get to their breeding grounds as quickly as possible and this year that just happened to be a month and a half earlier than normal.

Sometimes there is a large "peak" of snow geese at Middle Creek due to a "backup" of birds. That peak has been up to 150,000-200,000 birds at a single time. This can be caused when we have mild temperatures in our area, but to our north, waters remain frozen over and fields remained buried in snow. Think of a traffic jam waiting for the light to turn green, This winter not only saw the Middle Creek area with above-average temperatures and below-average snow cover, as mentioned, but areas to our north also saw many days that were ice- and snow- free. That allowed waterfowl to continue north without having to spend the extra time at Middle Creek.

The good news is that Middle Creek will continue to be a hotspot for other migrating species even after the white waterfowl species have left. Ducks continue to migrate through and soon enough the bold tree swallows will be back to claim their nestboxes around the wildlife management area. One thing is for sure however, as much as we would like to think we know everything about the spring migration at Middle Creek; wildlife and the weather always have something else in mind!



Photo by David Sonnen

### **Important Reminders!**

*Normally, some snow geese can still be seen on the lake by mid-March. However, this year was so warm and snow-free, that they were already well on their way in January.*

*Now that the crazy flocks and crowds have subsided, we can look forward to other attractions at Middle Creek, for both natural and Visitors Center events.*

*Of course migrating warblers and songbirds still draw the cameras and binoculars, but there are also abundant native wildflowers beginning to bloom.*

*Our event schedule continues to be action-packed, so be sure to check out Page 7 for details, as well as our Facebook Page for any pop-up events that get planned, such as archery!*



## ***Pop-up Archery Events at Middle Creek's Archery Range***

Middle Creek had its first of many archery events on February 11th. We had a great turnout with almost 70 people in attendance. Archers of various ages joined us on Middle Creek's archery range. For some of our attendees, they shot their first arrows ever. No prior experience is necessary to attend our archery events. We have National Archery in the Schools Program (NASP) certified instructors walk archers through how to shoot safely. All the equipment is provided and the events are free. We use compound bows with draw weights ranging from 12-20 pounds for these events which allows archers of varying abilities to shoot. Archery is a great activity for everyone to enjoy. If you have ever wanted to learn how to shoot archery, be sure to join us at our next archery event. We will be having Pop-up Archery once a month, alternating on Saturdays and Wednesdays at the Middle Creek Archery Range.

If you have your own archery equipment, be sure to check out the Middle Creek Archery Range. It is free to the public and open every-day from sunrise to sunset. The range will be closed during our Pop-up Archery events to ensure the safety of our participants. We hope to see you on the range soon.

### **Upcoming pop-up events:**

Wednesday, April 5th from 5-7 pm

Saturday, May 13th from 1-3 pm

Wednesday, June 21st from 5-7pm



## ***From the Southeast Region office to Middle Creek***

Last year, Emma Hamaker was a seasonal Information and Education Intern based out of the Game Commission's Southeast Region office near Reading where she assisted with educational programs, and occasionally came to places like Middle Creek to assist with biological research. Emma graduated from Delaware Valley University and is now employed at Middle Creek in a 1-year limited term role as a Wildlife and Fisheries Biologist Aide. Her position will also provide some much-needed assistance for our high volumes of educational program requests that generally peak in May and October each year. Even though Emma was exposed to some of the biological work done at Middle Creek previously, she is looking to get more hands on and increase her knowledge in that area, as well as using her education skills to interact with school groups, she notes that it will be interesting to be at Middle Creek every day of the week as opposed to her occasional visits, just to better experience the true diversity of activities that go on here at Middle Creek.

Emma is a native to Lancaster County and knows the area well. She enjoys outdoor pursuits (and frankly someone who doesn't would probably have a difficult time at Middle Creek!) such as hiking and fishing. She also just enjoys getting out to exercise while also getting caught up on reading when time allows it.

Make sure you join us in welcoming Emma when you see her at upcoming events!



## 2022-2023 Middle Creek Waterfowl Season Summary

**Editor's Note:** This data is a continuation of the hunt information that was in the Winter 2022 issue of *Middle Creek in Motion* and therefore includes the counts before and after Christmas.

The 2022-23 Middle Creek waterfowl hunting season came to a close in January after providing some quality hunting. Hunters were fortunate to have many days of good waterfowl hunting weather with only a handful of days of frigid, icy conditions that made for tough hunting and resulted in the only one day that no geese or ducks were harvested. The good days provided a nice bag of ducks, Canada geese and a few snow geese.

For the season, 14 different species of ducks were harvested. Mallards accounted for the highest number with 85. Black ducks and gadwalls came in second and third with 29 and 21 harvests reported. Additionally, lesser numbers of green-winged teal (9), bufflehead (4), hooded merganser (3), northern shoveler (2), wood duck (2), common merganser(1), American wigeon (1), ring-necked duck (1), ruddy duck (1), greater scaup (1) were checked in by hunters. Interestingly, hunters were fortunate to harvest 3 mallard/black duck hybrids as well.

As for geese, hunters harvested a total of 105 Canada and snow geese for the season. Eighty-seven of the Canada geese were from our resident population while 9 were determined by size to be members of the Atlantic migrant population. Hunters managed to harvest 9 snow geese by the end of the controlled hunt.

Middle Creek offers both goose and duck blinds to hunters. The biggest difference between the two is that duck blinds are positioned on a body of water while goose blinds are positioned in the fields. For the season, 31% of hunters in duck blinds harvested a duck. 12% of hunters in goose blinds harvested a goose. However, ducks are harvested from goose blinds and geese are harvested from duck blinds. For the season, 25% of all waterfowl hunters here at Middle Creek harvested either a goose or a duck.

If you would be interested in waterfowl hunting at Middle Creek you can find more information on the Middle Creek website or by stopping in at the visitor center.

### Spring Volunteer Day

There are some things you don't see often at Middle Creek, but I can tell you, they are actually quite common. No, not wild turkey, bobolinks, nor bald eagles. Our volunteers! Throughout the year, we have dozens of volunteers that are regularly working on our native plant gardens, hiking trails, and bluebird boxes. These groups meet both regularly and sporadically. Sometimes it can be difficult to get involved, especially if you are not available on weekdays.

This April, we are having a general volunteer day, which is on the 22nd at 10am: a Saturday. If you are interested in helping with the gardens, maintaining trails, or assisting with general beautification, this is a good day to come and help out. If you enjoy the work, you can talk to our regular volunteers to see how you can get further involved.



**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!



Canada geese are key figures in the origin story of Middle Creek. For photographers, they are often the easiest, most accessible, and most common subject to photograph. Therefore, for beginners, they are one of the best subjects to start practicing photographs on. Another helpful factor is that resident Canada geese are here year-round and there are always opportunities to find them. That being said, once and a while there is a rare opportunity to catch something extra spectacular, whether young goslings just out of the nest, or an uncommon subspecies showing up at the lake.

**Photo by Nancy Reber**

Once a more western species, coyotes have moved east and hybridized with wolves, resulting in the “eastern coyote.” The increase of this generalist in Pennsylvania is partially filling a vital ecosystem niche that has been empty since the last wolf was killed in the state in the late 1800s. However, the coyote will never truly fill the gap left by wolves as they mostly prey on young deer and not adults. Coyotes are “compensatory” predators and wolves are “additive”. In other words, coyotes kill the amount of deer that would otherwise die of natural causes, and do not cause a large decrease in deer.



**Photo by Judith Coble**



Eastern bluebirds can be seen in Penn's Woods throughout the year, but people really begin to start seeing them in early spring when they begin to stake out their nesting locations. Here at Middle Creek, we have over 250 bluebird boxes maintained and monitored by volunteers. Although it is common to see eggs or young in the nest, regularly being visited by the parents, but usually the fledglings are gone in a flash. The fun is seeing if another clutch will be laid in the same season and the cycle being repeated.

**Photo by Kim Davies**

## ***Partnership with Ducks Unlimited***

Ducks Unlimited and the Pennsylvania Game Commission are partnering on multiple water impoundment projects at Middle Creek's Wildlife Management Area. A lot of the water control structures that were installed in the 1970's which allow staff to manipulate water levels, are showing their age and need repaired. There are 64 water impoundments on the property, 33 of which have water control structures, that create approximately 90 acres of flooded wetland habitat. This does not include the main lake which is 360 acres in of itself. The impoundments with water control structures allow staff at Middle Creek to lower water levels during spring and summer to grow plants for food production for waterfowl and mimic natural seasonal dry conditions. During late summer and early fall these exposed mud flats serve as stopover locations for shorebirds to rest and refuel during their migrations from their breeding grounds in Canada and northern United States, to their overwintering grounds in the Southern United States and Central and South America. These impoundments are then flooded over fall and winter to serve as resting and feeding locations for migrating ducks and geese. If the water control structures are not replaced and updated, staff will lose the ability to fluctuate these water levels. Additionally, there are three new wetland areas to develop. The impoundment located near Stop 1 will be enlarged in size, and two new shallow water impoundments will be created along the tour road just past Stop 3 and the other below the habitat crew headquarters located off Sunnyside Road. Due to the soils and topography these areas naturally hold water during the rainy months and see some waterfowl use, however, with the help of Ducks Unlimited, we plan to regrade the areas, add a few berms, and install water control structures to these areas to improve their ability to hold water so we can regulate these areas for all the reasons listed above. With our recent success in our drawdown practices and the increase in waterfowl and shorebird usage, we all look forward to improving these habitat management practices and developing new areas for wetland loving wildlife!



## ***Discovery Backpack Rentals***

Welcoming all explorers! Are you interested in learning about birds? Want to develop a new hobby? Well with the Discovery Packs at Middle Creek Wildlife Management Area Visitor Center, you can do it all! Take one of our Backyard Birding Discovery Packs out to learn about bird biology, what makes a bird a bird, their habitats, and how to observe these creatures in their natural habitat. If you have heard about our famous snow geese and want to learn more about them and their incredible migration, rent out one of our Snow Goose Discovery Packs! Within both Discovery Packs, you will find the tools you need to become experts of the birding world and have some fun while doing so! These packs are offered for students in grades K-12 and serve as excellent learning opportunities for families here at Middle Creek. Available to rent at the Visitors Center!



## ***Carpe Diem—The Lake’s Invasive Carp Problem***

The common carp is an Asiatic non-native invasive fish species that unfortunately has become a major problem in the main lake impoundment at Middle Creek Wildlife Management Area. Carp eat the vegetation that is being grown during the spring and summer months when staff lower the lake levels. These plants and associated seeds they produce are meant to be food for migrating ducks and geese in the winter months. When water levels are raised, carp unfortunately decimate this plant growth leaving no structure for water loving insects called macroinvertebrates and nothing for waterfowl to feed on. This also negatively impacts other fish species in the lake as the entire food web is disrupted.

No plant life leads to less water loving insects, which leads to less food for fish, which leads to less fish and reduced reproduction. The carp also destroy nests of panfish species such as largemouth bass and blue gills due to the nature of them being a bottom feeder and rooting everything up. This also increases suspended solids also known as high water turbidity, which gives the lake that year-round murky appearance. This reduces the depth that sunlight can penetrate the water further limiting the ability to grow water loving plants.



**Photo by Craig Rearich**

To date no efforts have been made to reduce the amount of carp. Staff have started conversations with the Pennsylvania Fish and Boat Commission, as well as John Heinz National Wildlife Refuge which also has a major carp problem. Initial efforts to reduce carp will consist of nets lying flat on the bottom of the lake during summer months when carp come to shallow water to spawn. These nets will be baited with corn to focus carp on top of the nets. With the aid of weights suspended from poles, they can be released to quickly pull all sides of the net up at once capturing a large number of carp. These carp will then be placed in tubs of water where they will quickly be humanely euthanized by adding clove oil. The euthanized carp will then be donated to an animal protein food facility or buried on site. Any native beneficial fish will be sorted out and released back into the lake. Staff will conduct this activity multiple times during the summers of 2023 and 2024 to try to get a handle on the carp population. If these efforts are not successful a complete drawdown of the lake followed by the creation of fish structure habitat and a reintroduction of beneficial fish species may need to occur.

## ***First Completion of Middle Creek’s 50th Anniversary Challenge***



Samuel Howard was the first person to compete the Middle Creek 50th Anniversary Challenge! He turned in their card and received their decal sticker with our winning 50th anniversary design.

Samuel stopped by the Visitors Center to receive his prize. He said that he and his now-wife went on one of their first dates at Middle Creek and have been regularly visiting ever since!

Looking to get involved with state game lands, wildlife, hunting, and the outdoors? Grab our challenge [checklists](#) and [instructions](#) available at the front desk of the Visitors Center, or online.

Twenty-five activities must be completed out of a total of fifty. There are six categories of activities, and a specific amount of activities must be completed in each category, which totals twenty-five activities.

# Upcoming Events at Middle Creek

## March 20th—June 21st

### **Saturday, April 1st at 9:00 AM at the Visitors Center: Prescribed Fire Demonstration**

Join the Pennsylvania Game Commission habitat crew to learn about the history of fire ecology in the eastern US. Also learn how fire is used at Middle Creek, how prescribed fire differs from wildfires, and what equipment is used, such as drones. If weather conditions are within the allowed parameters, a prescribed fire will be demonstrated.

### **Wednesday, April 12th at 6:30 PM in the Auditorium: Uncovering the Mysteries of a Secretive Forest Raptor: Broad-winged Hawks**

Join Rebecca McCabe, a Research Biologist with Hawk Mountain Sanctuary, as she explains how Hawk Mountain is helping to conserve broad-winged hawks throughout their range. From monitoring nests here in Pennsylvania, to tracking them on migration, this program will provide exciting details on how researchers trap this elusive hawk and what they discovered by attaching tiny GPS backpacks to them.

### **Wednesday, May 10th at 6:30 PM in the Auditorium: Wildlife Photography 101**

This course is for those who are interested in learning the fundamentals of nature photography. We will review the different types of nature photography, discuss camera and lens selection, and helpful accessories – all geared toward the beginner. We will give suggestions on locations and shooting in a variety of conditions as well as providing helpful resources for those interested in learning more about nature photography.

### **Saturday, May 27th at 1:00 PM at the Visitors Center: Wildlife Photography in the Field**

This program covers choosing the right cameras, lenses and settings used for outdoor wildlife photography. Get tips on locating and photographing different wildlife depending on the subject, area, and weather conditions. Basic gear including clothing and layering for the outdoors will also be covered.

### **Saturday, June 3rd at 1:00 PM at the Visitors Center: Lenape Heritage and Storytelling**

Lenape Heritage and Storytelling will come to Middle Creek for an afternoon of storytelling and teaching on the Native American culture and heritage of the eastern woodlands.

### **Wednesday, June 14th at 6:30 PM in the Auditorium: The Governor's Invasive Species Council and Partnerships for Regional Invasive Species Management: a proposed program for invasive species management in PA**

The Governor's Invasive Species Council is composed of 7 state agencies and 14 nongovernment organizations who serve the commonwealth by providing state level guidance and coordination on programs and policies to protect Pennsylvania from invasive species. Currently the Council recommends the adoption of a state funded Partnerships for Regional Invasive Species Management (PRISM) program to address the critical need for invasive species control throughout Pennsylvania. This presentation will provide a brief overview of the Council and the proposed PRISM program.

**Pop-Up Archery Events at the Archery Range by Willow Point:** See Page 2 for more information on the dates and times of these free events!

**Contact us!** Have a question or comment about Middle Creek Wildlife Management Area? We would love to hear from you! Please contact us at [middlecreek@pa.gov](mailto:middlecreek@pa.gov).