

Evesham's Gateway to the Pinelands

Hike, bike, trail run, walk your dog, fish, birdwatch, and so much more...

Black Run is a great place for the community to enjoy

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FRIENDS OF THE



October
2020

Protecting and Preserving the Black Run for future generations

FBRP Needs You to Join Us in our Mission

Dear Friends,

To say this year has been challenging would be an understatement. Despite the challenges, FBRP volunteers continue to step up and help our organization move forward. Our Membership and Development Committees are working hard to raise funds by increasing membership and securing major donations. Trail Crew continues to maintain and improve our trail system. Nest Watch volunteers worked hundreds of hours monitoring nest activity this past season. Unable to lead fully guided tours due to the pandemic, individual Ambassadors are roaming the trails engaging visitors, distributing maps, and sharing knowledge about our ecological gem.

Meanwhile, our Outreach Committee is partnering with the Evesham Town-

ship School District. If you've been a FBRP member since our founding in 2012 then you know we've been huge proponents of peace since our inception; promoting JFK's 1964 Peace Speech, building the Peaceful Partners Trail (PPT), and working to fund the Peace Bridge. Read about our latest shout out to peace: a middle school art contest which highlights our region's peaceful cultural heritage.

The Trustees are working to ensure FBRP can meet our current fiscal challenges and still achieve our goals of future expansion of our trail system and the preserve itself. To these ends, the Board would welcome volunteer legal and financial consultants. If you have, or know someone with these



skills, please contact me at johnv@blackrun.org

The pandemic has accentuated people's need for peaceful places like the Black Run Preserve. Hopefully our efforts to promote outdoor recreation and education will continue to bring people

together in a spirit of respect and shared humanity as they enjoy our Pine Barrens tranquility and beauty. Thank you to our members, volunteers, and donors who have helped make the BRP become such a special place for our community and region.

Sincerely,

John Volpa, FBRP Founder and Chair

1,300 acres of Pinelands Paradise

101+ bird species sighted

12 miles of multi-use trails

Coming Soon for Members Only

Members, look for information soon on two fun, family-friendly events designed to add a challenging twist to your BRP exploration.

Photo Scavenger Hunt

Members receive a gallery of photos taken within the BRP. Your task is to locate the item or scene and provide proof with your own photo recreation of the original. The first member or member family to compete the challenge will receive a special prize: a custom walking stick, handcrafted and donated by FBRP Ambassador, Ron Pugh.

Progressive Geocache

Explore the BRP and answer several sets of some pretty challenging questions about the Preserve and the flora, fauna and ecology of the area. The answers can be found at each designated location, if you can figure out where to look for them. Correct answers will reveal the GPS coordinates for the next stage. Acing the series of challenges will lead you to the ultimate prize: the hidden geocache. Great exercise for the mind, body, and spirit!

Open Space Stewardship Project

FBRP is partnering with Evesham's Environmental Commission once again. Utilizing an Open Space Stewardship grant from the Alliance of New Jersey Environmental Commissions (ANJEC) we'll be planting native grasses, such as wool grass and switch grass, in the Black Run Preserve's decommissioned MUA basins. This joint effort planned for spring 2021 will continue FBRP's 2017 work to eradicate non-native Phragmites in the basins by creating more competition with Pine Barrens natives. Needless to say, we'll need many hands to



Cherokee HS Seniors planting native grass plugs in the south basin.

plant one thousand plugs! Stay tuned for updates as we approach the planting season so you can volunteer to get your hands dirty with us.

A Message from our Ambassadors

We miss being able to offer group events and hikes, which are suspended due to the Covid-19 pandemic. Once we are able to resume these activities, we look forward to offering a variety of walks and talks at the BRP, such as our tours of the bogs and their history, our "Forest Bathing" experience, and our hikes focused on the plants, birds and insects of the Pine Barrens. In the meantime, you'll see the Ambassadors out and about individually on the trails. Look for us by our Ambassador badges and the FBRP logos on our shirts and hats. We are happy to answer questions, provide directions and hand out maps -- at a distance. Looking forward to next season.



On one of our popular Guided Nature Hikes

Many of you know that FBRP Chair, John Volpa, taught for 37 years specializing in environmental science; experience which led him to become Pine-lands Adventure's Director of Education. The pandemic has forced his furlough from that role, but his loss is the FBRP's gain. With more free time to devote to his passion, he will be sharing some of his knowledge of ecology with FBRP members.

Pine Barrens Ecology Mini-Classes Wednesdays, October 14, 21 and 28 in the BRP

These three half-hour sessions, appropriate for children and adults alike, are **open to members only** and will focus on a variety of topics within Pine Barrens ecology. For the health and safety of all, registration will be strictly limited to 12 attendees per session, with a maximum of 2 people in each party. Masks and social distancing will be required.

Visit the Events page of our website on the Monday prior to each session for more detail about that week's topic, location, and registration.

Just for Kids

Needless to say, the pandemic has severely curtailed event plans. But that didn't stop member **Stephanie Morriss**, who used this time to create three Activities for Young Children for our members to download and take along on their next adventure in the BRP. Appropriate for children 4 years and up, her activity sheets will help make your next family visit to BRP enjoyable and rewarding.

[Click here to download your copies!](#)

NOW OPEN: FBRP Online Store

Show your love for the BRP and help us keep it amazing with your purchase of apparel and accessories in the new FBRP store.

A portion of each purchase helps to fund on-going conservation, advocacy, educational and recreational programs for you, your family and future generations.



[Go Shopping!](#)

Rescheduled from 2020



2021 JURIED PHOTOGRAPHY & ART EXHIBITION
May 3-27, 2021 • Artists' Reception: Friday, May 14, 7-9 pm
Center for the Arts in Southern New Jersey • 123 South Elmwood Road, Marlton

[Click here for complete details and entry form](#)

People of the Pines. People of Peace.

A Unique, Enriching Opportunity for local Middle Schoolers

Did you know that in 1638 Swedes and Finns were the first Europeans to successfully settle in the Delaware River Valley and lived peacefully with the Lenni Lenape? Did you know that the first English Quakers arrived in what became Evesham in 1677? Did you know the Evans and Wills families arrived on that first ship, helped found Evesham and that their descendants owned the land that has become the Black Run Preserve; farming cranberries there until 1965 and operating for more than a hundred years?

FBRP is pleased to announce an Art Contest titled **People of the Pines. People of Peace**. Funded by an anonymous donor in memory of teacher,

Lynne Pugh, the contest will be open to middle school students of Evesham Township and the Big Brothers and Big Sisters of the Delaware Valley. Students will be provided with background information about the diverse cultures and historical figures from the region that cooperated with each other in order to share the land in mutual respect. The remarkable result is that there was never any war between different cultures in West Jersey. Quaker beliefs would evolve through the works of people like Mount Holly's John Woolman, creating the Anti-Slavery Movement and establishing the Underground Railroad which ran through West Jersey. Son of former slaves, William Still, born in the Pine Barrens would become known as the Fa-

ther of the Underground Railroad. These are but a few stories about the unique cultural heritage of Evesham and the surrounding region which will be highlighted and expressed as art by participating students.

FBRP is currently forming a Judging Committee to develop the criterion for the artwork which will be displayed on signposts along the Peaceful Partners Trail. FBRP plan to announce the details of this art contest to invited middle school communities in late fall.

Pine Barrens History for the Rest of Us

You don't have to be a Middle Schooler to learn about Pine Barrens history. John Volpa will be presenting two programs on fascinating local historical figures as part of the Pinelands Commission's educational outreach. Both will be recorded and available for viewing anytime on YouTube.

Serendipity: John McPhee's The Pine Barrens
[Watch now on YouTube](#)

The Legendary Still Family of the Pines
[Available October 8th on the Pinelands Commission Channel](#)



The Friends of the Black Run Preserve has as one of its missions the stewardship of the multi-track (hiking/biking/skiing) trails throughout the area. As we all have been observing the recommended guidance for keeping our community and outdoor spaces safe and healthy during Covid-19, certain needed trail maintenance activities have been ongoing. Preserving the quality of the outdoor experience, while providing a minimal level of soil and vegetation disturbance are some of the goals of our trail work. During the spring and summer months we have:

Improved the blazes at the Long Path (red) and Bortons Connector (yellow) trail junction (the four-way junction). Installed two sign boards on posts with blaze turn signals for both trails.

One of our local Boy Scouts contributed by repairing and replacing some of the ropes marking the recent plant restoration area between the south basins to "close-off" the area so people don't walk on the new growth.



Maintenance was performed to remove two beaver dams, one blocking the third bog downstream and the other blocking the first bog underneath the Township Bridge.



We have plans to improve the marking of the Nature Trails throughout the preserve. All Nature trails are "dead-ends" and only for hikers (others are prohibited to protect the fragile ecology along those short trails).



Improved the marking at the start of the Kettle Trail (white) where it begins at the PPT (blue) trail. Installed a sign board on a post with the three-marker up-triangle "start of trail" symbol.



We have removed several fallen trees and many numerous smaller branches and wood debris that was blocking trails from the recent storms.



The southern section of the Long Trail (red) was renamed and remarked. It is now called the Log Circle Trail with Silver Dot blazes, running from the south Log Circle at the Bortons Connector (yellow) junction east to the end of our property.

We just completed a clean-up event as part of the Evesham Communities Program. Join us for our next scheduled event:

CLEAN COMMUNITIES CLEAN UP DAY

Saturday October 24, 9:00 AM to noon



Improved the Basin trail with new green blazes starting with the PPT (blue) junction at the south basin, around both basins, and continuing to the intersection of the Kettle Trail (white) trail.

We will adhere to proper social distancing, appoint a Safety Supervisor to ensure that COVID-19 guidelines are followed and enforced, wear gloves, limit to 10 volunteers in one location, and social-distance.



Improved the signage on the Long Path (red) where it crosses the east end of the basins by installing four sign boards on posts with red "turn signals" for better directional marking where the red trail does a "zig-zag".

As our trail network has become more developed, we have established a team of volunteers as trail maintainers for effective trail care. We thank them for their volunteer service, and welcome all to join us at our trail clean-up events.



WHO: Anyone who enjoys the pristine beauty of the 1300 acres that the Black Run Preserve offers can become an annual member and take pride in helping to care for this treasured corner of the Pinelands. Already a member? Thank you for your support! Current members receive renewal notifications one month prior to their expiration date.

WHAT: Your membership is an annual donation. In addition to helping us to achieve our goals, FBRP membership affords you special insider opportunities to enjoy special programs and events not available to the general public.

WHEN: There's no time like the present. It has been a challenging year and the FBRP needs your help now! There are scores of volunteers dedicated to making the BRP a welcoming environment for year-round enjoyment, but it takes more than hands to get the job done. It also takes considerable financial resources.

WHERE: Where does your money go? It funds countless projects undertaken

by our volunteers. Here's an overview of our committees and the mission critical work they perform:

Ambassadors: upon completing a comprehensive training program, these volunteers are able to lead guided hikes in a fun and educational way. When they're not out leading groups they walk the trails and provide guidance and information to the visitors they encounter.

Trail Crew: these volunteers are priceless in keeping our trails clear of litter, debris, and fallen trees. They install benches and signs, they build bridges - whatever needs doing, they're on it. They are the true caretakers of the land and they truly care.

Nestwatch Project: these volunteers build and install bird boxes and dedicate countless hours keeping track of the 100+ bird species found in the BRP and reporting their ecologically significant findings to Cornell University.

Events and Outreach: these volunteers plan public and members only events and man tables to promote the Black Run Preserve and all the wonderful things it has to offer.

Membership Committee: these volunteers are trained on and use CRM software to keep track of and communicate with new and current members. They also work tirelessly to create special events and membership drives.

There are the obvious costs of such things as lumber, hardware, hand tools, power tools, educational signs, bathrooms, trash and recycling bins; but, there are also hidden costs of running an organization including insurance, a post office box, computer software and printing. Your membership fee helps the Black Run Preserve offset the cost of these materials and services.

WHY: The Black Run Preserve is a reprieve from all the craziness in the world today. It's a place to breathe in fresh air, get some exercise and replenish our souls. It's a fun and safe environment for kids to explore and learn about nature. Your membership dollars will help the volunteers keep it that way.

HOW: It's Easy! Click here and select the membership level that is best for you.

Dollars and Sense: Working towards FBRP's Financial Future

The Friends of the Black Run Preserve (FBRP) have embarked on the formation of a Development Committee that will be focused on several aspects of supporting the Black Run Preserve for both current and future needs. The committee currently consists of Founder John Volpa, Board member Charlie Chelotti and Ambassador John McPeak, who have been working to put together the framework for this major fundraising development effort. With a target of raising \$500,000 over the next 2 years, this framework will include outreach to local community businesses for grants and support towards potential expansion of the BRP acreage, and opportunities for interested individuals to support the mission and goals of the FBRP.

As the local communities become more and more aware of the BRP the number of people enjoying healthy, nature based recreational activities has increased each year. THE FBRP are committed to the stewardship of the preserve and promoting it to the community for the many benefits a hike, run or bike ride

in the woods provides. Fostering that public enjoyment is so important to the Friends, but equally important is protecting the watershed and developing educational opportunities regarding the rich natural, historical, and cultural aspects of the Black Run Preserve and the Pine Barrens.

There are so many ways you can support the Black Run Preserve; your basic membership is a start in providing the organization a steady operating budget for the many activities that the Friends run throughout the year. Our new Membership Committee is working very hard to expand our membership, with a goal of 1,000 members in the coming years. All donations are always welcome and can be made right at our web site www.blackrun.org/donation. Also, we are part of AmazonSmile and we encourage you to think of us while shopping at Amazon. Just type in "Amazon Smile" on your Amazon search bar and choose "Friends of the Black Run Preserve" as your AmazonSmile Charitable Organization!

If you work for a company that is community minded and looks to support healthy community values introduce them to us and we will reach out with a qualifications package and presentation. As a 501(c)(3) non-profit organization we are eligible for matching gifts from your employer if they have a matching gift program - many do! We also encourage you and your family to think about this special place as part of your legacy planning and we can meet with you to discuss a wide range of legacy gift options. There is no greater gift to our communities than preserving our little oasis of pristine Pine Barrens ecology., Every dollar truly makes a difference, especially during these difficult times!

If you are looking to help or have any questions on how your gift can help us maintain this amazing space for generations to come, please contact:

John Volpa (jvolpa@blackrun.org)
John McPeak (jmcpeak@blackrun.org)
Charlie Chelotti (cchelotti@blackrun.org)

Black Run Preserve NestWatch Project

2020 Update

Jeff Jackson, NestWatch Co-Chair
Doug Wallner, NestWatch Co-Chair
Keara R. Giannotti, FBRP NestWatch Liaison



Breaking out of an egg is exhausting work as this Carolina Wren hatchling would tell you

The Black Run Preserve is host to many bird species, and FBRP has been monitoring the nesting success of some of them since 2015. Volunteers in the Black Run Preserve's NestWatch Project monitor our box nests throughout the spring and summer, recording the number of eggs laid, nestlings hatched, and successful fledges. This data is submitted to the University of Cornell's NestWatch Program, a nationwide monitoring program designed to track status and trends in the reproductive biology of birds, including changes over time as a result of pressures from invasive species, climate change, and habitat loss. Our program is the only Chapter in New Jersey to be recognized by the Cornell Lab of Ornithology. Natural nests can be monitored by citizen scientists too, but in the Black Run we report strictly on the birds that use our boxes.

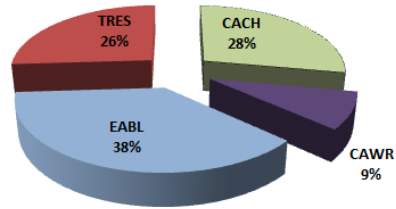
In late winter of 2020, we did a lot of pre-season work to get ready for the 2020 NestWatch season. We updated training materials, trained new volunteers, relocated nestboxes (with the help of trustee Rich Taylor and the Black Run trail crew), updated our maps (also with the help of Rich Taylor!), cleaned out nestboxes to make sure they were free of parasites, and covered the inside of the lids with ivory soap to prevent paper wasps from making nests in there - because there's nothing that deters a bird or a NestWatch volunteer more than a nest of wasps! After that, all we had to do was wait for our migratory birds to arrive and for our resident birds to find the boxes.

We didn't have to wait long! By the end of March, we already had a complete nest in box B-05 on the white trail. By the looks of it, it was a Carolina Wren (every species of bird makes a different type of nest, and this one was classic Carolina Wren - constructed of moss and leaves). By April 1st the nest had five eggs already! It was our earliest ever nesting in the NestWatch Project, and also our first Carolina Wrens. To read more about this nest and its interesting construction, see article "NestWatch Mystery: The Case of the Carolina Wrens & the Missing Snakeskin" on page 8.

The birds that use nestboxes are typically "cavity nesters" that choose nestboxes over tree cavities. The species that used our boxes this year were

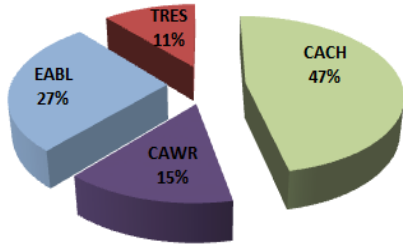
Carolina Chickadees, Eastern Bluebirds, Carolina Wrens, and Tree Swallows. The following is a breakdown of eggs laid and chicks fledged by species in this season's 35 nestboxes.

Black Run Nestwatch 2020
Percent of Total Clutch Size By Species, n=104



Eastern Bluebirds (EABL) led in the number of eggs laid, laying 38% of the eggs 104 eggs we counted this season, followed by Carolina Chickadees (CACH), Tree Swallows (TRES), and Carolina Wrens (CAWR).

Black Run NestWatch 2020
Percent of Total Fledglings By Species n=62



Although our Carolina Chickadees (CACH) were in second place for number of eggs laid, they led the way for successful fledging. All of our Carolina Chickadee young hatchlings fledged successfully, representing 50% of the total chicks that fledged in our program this season. Eastern bluebirds (EABL) represented 29% of the total number of chicks fledged, followed by Carolina Wrens (CAWR), and Tree Swallows (TRES). The Tree Swallows that fledged unfortunately represented only 11% of the total chicks fledged. We had several incidents where Tree Swallow chicks or eggs were subject to some kind of predation which occurred at some point during the nesting cycle. To a lesser extent this was also true of many of our Eastern Bluebird broods. Most of the time when we find that eggs or chicks

have "disappeared" it's impossible to know the exact cause, but predation or competition (from another cavity nester such as a house sparrow) is assumed. Over this coming winter, our task will be to identify how we can improve nest success for Tree Swallows and Eastern Bluebirds (such as changing baffle type and/or relocating boxes to offer more protection from predators).

As far as the humans in our NestWatch program go, we had record participation this year. Six teams of 10 individuals were trained and visited nests for a total of 21 weeks despite challenges caused by the pandemic. A total of 880 visits were made to the 35 songbird sites and approximately 934 visits - when counting the 2 kestrel and 5 wood duck boxes. A total of 414 visits were reported to the Cornell database.

Special thanks to volunteers Steve McGeady, Liz Poole, Marge & Rich Taylor, Justen & Steph Morriss, Doug & Betty Wallner, Jeff Jackson, and Keara Giannotti for all their hard work this season monitoring our nest boxes this past season.

If you love the Black Run Preserve and have ever wanted to get more involved, there's no time like the present. Participating in the NestWatch project is fun, educational, and easy - just about anyone can do it. Volunteers visit nest boxes every 4-5 days and record their observations. If you would like to volunteer to either help re-locate nest boxes this winter, or sign up for training to monitor nests next spring, please email admin@blackrun.org for more information. But volunteering isn't the only way you can help. Becoming a member of the Friends of the Black Run Preserve is easy and helps support this program in addition to all of the work we do to keep the Black Run Preserve pristine, protected, and educational. Visit our website www.blackrun.org to support our efforts today.



Eastern Bluebirds



Tree swallow guarding its nest



Tree Swallow hatchlings



Carolina Wren hatchlings

NestWatch Mystery: The Case of the Carolina Wrens and the Missing Snake Skin

Keara R. Giannotti, FBRP Trustee and NestWatch Liaison

THE EVIDENCE

Exhibit A



Wren nest with snake skin
Keara Giannotti

Exhibit B



Wren nest with plastic
Jeff Jackson

By mid-March, our prep work for the upcoming 2020 Black Run NestWatch season was finished and we had begun conducting our nestbox checks with great anticipation, taking a peek every few days, hoping to see new twigs, some grass, a few pine needles, a bit of sphagnum moss, or even duck feathers (a favorite Tree Swallow nesting material), any clue at all that the nesting season had begun.

While there were no nests yet, the signs of spring were everywhere! Male birds were singing exuberantly throughout the Black Run Preserve, broadcasting their presence and their health to prospective mates. Male and female birds of all species were forming pair bonds, courting, feeding each other, and beginning to explore the preserve's many nooks and crannies, looking for the best place to raise a feathered family. Some of the birds that we monitor in our program are year-round residents of the Black Run, like Carolina Chickadees and Eastern Bluebirds, but some are migratory and were just beginning to return. In fact, just a few days before, NestWatch Co-Chair Jeff Jackson had witnessed hundreds of Tree Swallows swooping and diving and circling around the bogs, just finishing their journey from Central America.

Toward the end of March, volunteer Steve McGeady had some welcome news: There was the beginning of a nest in box B-05 on the white trail! At first there was just some grass and a few leaves – not enough material for us to decide which species had already begun building. We continued to watch it over the week, and at every check we saw the nest grow. By the following week the construction was complete. The domed, cup-shaped nest had a grass layer on the bottom, about two inches of moss mixed with leaves in the middle, and a soft nest cup of grasses on the top. Classic Carolina Wren. To confirm, we just needed to see the eggs and maybe one of the adult birds. We were all very interested in the news because not only was it our earliest

complete nest in the history of our NestWatch Project, if it turned out to belong to a Carolina Wren, it would be the first time this species had used our nestboxes since the program began.

Even though the nest was on Steve's regular route, a few of us took turns checking it for the following couple of weeks, as excited as expectant parents. Following NestWatch protocol, which recommends checking nests only every 3-4 days, we used a Google sign-up sheet to let each other know who would check it next (too much disturbance can cause nest abandonment, which is why no one but NestWatch volunteers should approach boxes in the preserve). We watched the progress of the nest from the first laid egg to the last, and we each made our own observations, documenting every visit with a quick photo (no flash) that we emailed to one another to keep everyone informed.

After one of my checks, I got home and sat down at the computer to record my observations. I looked at my photo and counted 5 eggs in the nest. But there was something else too – when I zoomed in on the photo, I noticed a translucent object with a diamond-shaped pattern behind the eggs. One of the adult Carolina Wrens had placed a small piece of shed snake skin in the nest. I made a note about it in our database. I thought it was interesting but didn't think of it any further.

A few days later, Jeff Jackson sent his photos to our group. Still five eggs, still no adults seen, but something was different. I could see something in the nest behind the eggs again, but when I zoomed in, I realized it wasn't snake skin this time. Instead, it was a small piece of plastic, a wrapper of some sort. What had happened to the snake skin? This wasn't the first time I'd noticed plastic in a bird's nest. In some of the nests I monitor at Camp Creek Run, I've found plastic wrappers in nests made by Carolina Wrens, Northern Cardinals, and Eastern Phoebe. I'd always wondered

about the incorporation of plastic rather than natural materials, but I chalked it up to a bird's instinct to seek out the sturdiest and most "weatherproof" materials they could find – maybe sometimes that's a leaf or a vine, but perhaps a Jolly Rancher wrapper or piece of snake skin also fit the bill.

Because we hadn't yet spotted the adult Carolina Wren for box B-05 (it would later be photographed & confirmed by volunteers Justen & Steph Morriss), I was still searching Carolina Wren nests online to compare its eggs and nest with other birds. I visited one of my favorite sites, Cornell's website AllAboutBirds.com, and there, in the description of the Carolina Wren's nest, I was surprised to read that "it's loosely constructed of a great variety of materials such as bark strips, dried grasses, dead leaves, pine needles, hair, feathers, straw, and snake skin..." Snake skin! I couldn't recall having seen this in a list of bird nest materials before, so I referred to one of my favorite books "The Birder's Handbook: A Field Guide to the Natural History of North American Birds", and there again was a mention of some bird species incorporating not just shed snake skin into their nests, but plastic as well.

So now I knew that both shed snake skin and plastic were more common nest-building materials than I'd realized. But why would birds use either of these items at all? A good friend of mine, who is a biologist as well as a gardener, keeps any snake shed he finds to use in his garden, to deter groundhogs, squirrels, and voles. Could our wrens be using snake skin in the same way to deter potential predators? But why would a nest have a piece of snake skin one day, and plastic the next? Off to the internet I went to do some more investigating, and it turns out there is some good research out there to back up the idea that birds use shed snake skin to protect their nests. Birds.com references a study conducted by ornithologists at Arkansas State University that theorized that birds use snake skin to deter predators, especially

mammalian predators like southern flying squirrels. In their study, the scientists explained that both rat snakes and flying squirrels are the main predators of some species of birds' eggs. Flying squirrels have been known to take over nest cavities occupied by birds and also eat their eggs. Rat snakes also prey upon bird eggs (and baby birds), in addition to seeking out nest cavities, both for shelter and to find food – and flying squirrels are definitely on their menu. So the researchers hypothesized that birds used snake skin to deter flying squirrels and other mammalian predators (like mice and gray squirrels) that would be wary of, and thus avoid, any nests that smelled like snakes.

The researchers tested their theory by using 60 nestboxes filled with quail eggs. They lined 40 of those nests with shed snake skins, and left 20 boxes with only eggs. At the end of their study, their hypothesis seemed to have held up: All of the boxes with snake skin were left untouched, and up to 20% of the other boxes had been preyed upon by flying squirrels. The researchers concluded that snake skin did, in fact, help deter predators.

The Black Run is home to all of the animals mentioned in this study, including Eastern rat snakes and southern flying squirrels, so it's not out of the question that our Carolina Wrens have the same selective pressures acting on their nesting behaviors. It is very likely that the wrens in B-05 placed the snake skin in their nest for protection. But why had they replaced the snake skin with a piece of plastic? Ornithologists believe that birds sometimes use plastic rather than snake skin because of its visual similarity. Most birds (with vultures being an exception) have a very poor sense of smell, relying more on keen vision and hearing. Birds that are inclined to provision their nests with snake skin locate this material by sight.

Perhaps the Carolina Wrens in B-05 were instinctively changing out the

snake skin, looking for a fresh piece. Because even though birds don't have a great sense of smell and wouldn't know if the skin still had a scent, maybe birds that change out snake skin regularly are more likely to have young that survive, so this inclination or trait gets passed on from generation to generation. And maybe when our wrens were doing some instinctive, routine nest maintenance, they mistakenly replaced the snake skin with plastic because of its visual similarity. I'd wondered about the incorporation of plastic in birds' nests for years, and was happy to finally put the mystery of it, and the missing snake skin, to rest. But now I had one more worry to add to the growing list of concerns for the health and survival of birds.

Because plastic doesn't smell like a snake and doesn't deter predators, birds that choose plastic over snake skin are inadvertently putting their young at risk. The more plastic waste that's available to birds, the more likely it is that birds could use it as nesting material instead. We already know about some of the effects of plastic on birds: If eaten it can get trapped in their digestive systems, or it can get wrapped around their legs or wings and impede their flight. But the research above shows even more subtle yet far-reaching effects that plastic waste can have not only nesting success, but on evolutionary behavior.

With North American birds already declining at an alarming rate (according to a 2019 report of the Cornell Lab of Ornithology), they certainly don't need more preventable threats to their survival. The scenario described here is just one more reason to "Leave No Trace" when visiting the Black Run Preserve, carrying out whatever we carry in. But leaving no trace is about more than that – it's also about doing our part to leave the Black Run, and any place we walk, BETTER than we found it, by picking up what others may have left behind. Even if it's just a seemingly insignificant plastic wrapper. Our tiny Carolina Wrens will thank you with a song, and perhaps even a 100% successful fledge of young birds.

A Reminder to our Visitors



The Black Run Preserve is Open

Fog over Foliage, Amy Golden

PLEASE NOTE THE FOLLOWING RESTRICTIONS:

- Social Distancing is required. Family groups: please walk the trails single file to allow room for fellow visitors who may need to pass.
- Communicate with others when approaching to coordinate safe passage.
- Face masks are strongly recommended at all times, but required when encountering others along your route.
- Parking lot capacity is being strictly enforced. If lots are full, you must return at another time. There is no over-flow or street parking.
- Portable restroom facilities are provided by FBRP at the Kettle Run Road East and Borton's Road trailheads. Please keep them in sanitary condition.

As always, out of respect for the land and the people who enjoy it, leave no trace:

- Pick up and remove trash.
- Keep dogs on leash at all times; pick up after your dog.
- DO NOT cut new trails. If absolutely necessary, you may step off a narrow trail to allow an individual or group to pass, being careful not to tread on plants.