What’s This?
By George Johnson

The most commonly asked question for me when I’m leading a hike is simply, “What’s this?”. It’s a great question and I highly encourage people to ask questions about things they see, even if it’s not related to the theme of the hike/activity. I’ve asked that question many times before and it’s a great and effective method of learning more about something that catches your eye. Most of the time, about 75% or so, I can confidently provide an answer about what something is. In that 25% of the time though, in addition to saying “I don’t know.”, I can provide a wonderful teaching lesson about some of the modern tools to help identify our local flora and fauna.

In the days before modern technology, if you wanted to ID an animal or plant you’d have to go through a dedicated guidebook to try and look it up. Guide books are amazing resources and contain lots of information, but they are limited in certain regards. If you brought a guide book for every topic out into the field, then your bag would probably weigh about 50lbs. You’d need a book for birds, reptiles and amphibians, flowers, trees, insects, mushrooms, etc…. And these books are not small books either. You can purchase smaller guides for each, but in many cases the smaller guides only provide information on the most commonly found individuals of that topic. To save some space and not break my back, these days I keep all of my guidebooks at my desk should I ever need to reference something. On the trail however, I use some apps on my phone that makes identifying things easier than ever.

I’ll list some of those apps that I currently use and have had success with below, but they all follow a similar format. Generally, all you have to do is take a picture on your phone and upload to the app. The app then can give you suggestions on what it thinks that it is. I’ve found that most of the suggestions are pretty accurate, and, if not, they at least get me pointed in the right direction. Additionally, the more pictures you take, and at different angles, then the more accurate it can become. Some apps will even let you post your pictures online and other people can then lend a hand at identifying the subject.

For pictures of plants and flowers, I’ll use either Leafsnap or PictureThis. They are both free to use, but do have premium versions available if you wanted to avoid ads. For a more general approach, I’ll use iNaturalist. iNaturalist is by far my favorite app to use for easy ID. It’s very user friendly and has the added benefit of assisting with numerous different citizen science projects. An ID app that I just

Continued on page 4
I messed up. I tried to get a photo of PEEC’s water bottle filler displaying that PEEC visitors had saved the exact number of water bottles used in the SkyPod sculpture on top of the PEEC main building. On Friday the count was well below 2653 bottles, but by Monday I had missed my moment. Still, it is a very impressive accomplishment to say that PEEC’s bottle filler has saved 2703 bottles, so far.

We installed the bottle filler just as the COVID-19 pandemic began, so it was slow going as PEEC was closed, then it was just PEEC staff and a few visitors. Now that PEEC is back in full swing and the weather is warm, very warm, we are hosting parking lots full of students and campers and hikers who need to hydrate. What I love about the counter on the bottle filler is that it is so tangible, quantifiable, and immediately gratifying as the number ticks over when you refill your bottle. We are fostering the habit of sustainability and trying to make it effortless, so it becomes the norm. Plus, it is fun.

My office is very close to the PEEC front desk, and as anyone who knows me is aware, my door is almost always open-- so I overhear many visitor interactions. “Do you sell bottled water?” is one of the most common questions after, “Where are the trails maps?” and “Where are the bathrooms?” The response is always the same—we don’t sell bottled water, but we do sell PEEC refillable water bottles for $5 and we have a bottle filler and a water fountain. The decision to not sell bottled water is intentional. Our tap water comes from two deep wells on the campus and tastes great. Bottled water is unnecessary and we don’t want to add to the dual problems of plastic waste and microplastics-- in just about everything--other than PEEC’s well water.

I wish I could have set the bottle counter back to get my ideal photo, but alas that was not possible (Photoshop is not one of my skills.). I had to deal with the photo I had and make the best of it for this message. It is like dealing with the problem of plastic waste itself. We are where we are and the valuable question is what can each of us do going forward. The difference is, we know there is a problem, which has mainly been perpetuated by perceived convenience and inertia, with a healthy dose of commercial marketing. We have a simple solution- use a refillable bottle, and it is really kind of magic with the motion activated control on the bottle filler. Now we just need to get everyone to exchange a bad habit for a sustainable and healthier one. I don’t know about you, but that sounds like the goal for the rest of my life too.
A PEEC Inside
By Xzy-Nayé Campbell

Xzy-Nayé is one of PEEC’s 2021 summer AWE (Alliance for Watershed Education) Fellows.

Usually, the unknown scares us. It's this perturbing sensation that pokes and pokes—like a woodpecker—until the unknown suddenly morphs to known. That's kind of how I walked into the fellowship program. I'm a Communications major, so I've dealt with all kinds of people and different circumstances, but never have I ever seen myself as an outdoorsman. I never saw myself as someone who loved to take hikes or catch critters, so when I first was recommended a job at PEEC from a past employer, I was skeptical, say the least. I mean, I'd never imagined myself setting foot in the world of nature, but here I was, sitting in an interview with Derek Scott, feeling almost intrigued to try something new. I remember a moment—during this interview—when I emphasized how I wasn't too experienced when it came to nature activities and the like, but Derek welcomed me with open arms and told me if I'm open, he's excited to have me.

Honesty is virtue, and to be honest, it took quite a while for me to get my foot in the door. I'd never really hiked before, so it took a bit to get comfortable hiking by myself. I'd never caught critters before—I was fearful of bugs—but suddenly I could catch anything without fear. I hadn't even kayaked or canoed before, but here I was, having fun maneuvering through the vast Delaware River. It was exhilarating, this rush of the unknown that peaked and pulled and chewed until it became almost routine. It became known to me—pun not intended—that when I stepped my foot into the unknown, I began to learn something new—and even newer—about myself.

And of course, we also do the things that we are familiar with. However, the things I thought I was great at, I ended up expanded my knowledge on, kind of like some big philosopher. To go back a few steps, yes, I am a Communications major. I've dealt with many people and circumstances, but I've never held my own community day before. Well, to further explain, for the fellowship, there's this capstone project we must accomplish. You're given a set budget, a set of rules, and you're pushed on your way. It sounds kind of simple, right? Fear not, because it wasn't.

I had to sit myself down and think of a game plan, sometimes so lost in my thoughts that I had to remind myself what my end goals were. I had to create a budget. I had to create a promotional plan and marketing materials. I had to contact, email, contact, call, contact, meet. I had to stretch out my hand so many times with a big smile my cheeks were stiff. It was tiring and exhausting, a big mighty battle filled with pages of ink and coloring pages and free snacks, but it was worth it. I had to put my all into something new—something I had full control and vision over—and that was a rush. It was a dopamine mixed in my blood that ignited a new spark and love for communications I didn't know I had in the first place. It felt like I've found a piece of my purpose—a dose or missing piece—that helped me get a step closer to solving the big quest I call my life.

Pocono Environmental Education Center was a full ride. Like every story, it had its ups and downs, its trial and tribulations, its fiends and enemies and heroes. However—as all stories go when the falling action seeps into sleep—its conclusion arrived. These twelve weeks were filled with many emotions and experiences—emotions and experiences that I wouldn't take back—because the story has already met its end, and, well, because I found more of myself that I didn't know I'd lost. A piece of who I'm meant to be was found thanks to PEEC, and it just so happens that I was given the key to peek inside the treasure chest called my future.

HARVEST FESTIVAL
SATURDAY, OCTOBER 9, 2021 • 11AM - 4PM

Fall in love with FALL
Celebrate Fall at PEEC's 11th annual Harvest Festival! Enjoy animal presenters, arts & crafts, hands-on activities, conservation exhibits, live music, local food, old-timey activities, & more! Bring your family & friends to this great event! $5 PER CAR

CALL FOR DETAILS
570-828-2319
peec@peec.org • www.peec.org

POCONO ENVIRONMENTAL EDUCATION CENTER
538 Emery Road • Dingmans Ferry, Pennsylvania

PEEC is close to home, where learning comes naturally! PEEC is located off of Route 209 inside the Delaware Water Gap National Recreation Area in Dingmans Ferry, Pennsylvania.
Volunteering At PEEC
By Derek Scott

If you appreciate the work we do here at PEEC, considering volunteering your time and services to allow us to continue to inspire the next generation of environmental stewards. We have volunteer opportunities for all schedules, skill sets, and ability levels and strive to match dedicated individuals to tasks and projects they will enjoy doing.

Here are just a few examples of current volunteer opportunities:

**Ecozone Volunteers**
Our Ecozone volunteers aid our instructional staff once or twice each month with public tours in our hands-on, discovery based learning room. This is a great opportunity for individuals who want to share their knowledge and passion for the outdoors with newer or younger users who may just be starting to explore. Learn about the natural history of our area without leaving our main building by climbing into a Bald Eagle’s nest, crawling into a bat cave, or exploring a beaver lodge. All of our exhibits are themed around the local environment and are a great way to get visitors excited about our trail system and other programs.

**Trail Stewards**
The Trail Stewards are just as much PEEC volunteers as they are National Park Service volunteers. One weekend each month, this crew spends between 10-15 hours maintaining our 10+ mile trail system, doing everything from light duty clearing and blaze work to building benches and bog bridges. If you regularly enjoy hiking our trails, consider being part of the team that keeps them in shape!

**Garden Volunteers**
Between our flowerbeds, rain gardens, greenhouse, and aquaponics systems, there is a lot of gardening and plant care to be done at PEEC. If you have a green thumb or love doing landscaping work, our garden volunteers help keep our campus looking great. Based on interest and availability, garden volunteers can focus on a specific project if there is something in particular that peaks your interest.

**Weekend Office Volunteers**
Individuals who love what we do and want to share it with the world are encouraged to volunteer their time working in our main building during the weekends. These volunteers help answer questions about the trails, programs, and National Park for the influx of weekend traffic we typically see. Office volunteers also assist with program registration, answering phones, collecting surveys, and data entry.

Have something else in mind you do not see listed above? Reach out and let us know how you would like to help us continue to help PEEC grow and inspire an appreciation of the outdoors for 30,000 people each year.
Witch Hazel - *By Emma Roth*

Like many of the staff members here at PEEC, I had a very busy summer. So when Janine asked me this morning if I had my newsletter article ready, I was unprepared. I had known about it, and like always, was planning to write something prompt and on time, but summer had other plans. And I suddenly felt an unexpected connection with a small tree. A tree that lives life on its own schedule, and doesn’t always meet the schedule and deadlines followed by other plants. The Witch Hazel.

Witch Hazel is a small flowering tree. But unlike almost all other flowering plants in this region, it does not bloom in the spring and summer. Instead, Witch Hazel blooms in the fall, with most individuals flowering in October or November. While the small, yellow flowers are not the showiest or most dramatic flowers you’ll find, they can stand out starkly as they remain on the tree after all the leaves have fallen off for the winter.

So why do witch-hazels bloom so late (or are they very early?). Well I can’t comment on whether it is late or early, but they bloom when they do to reduce any competition with other plants for pollinators. Even in October and November, when most insects have died or gone dormant, there are still a few stragglers flying around. These are the pollinators that witch hazel relies on. Sure, there are not nearly as many insects flying around and visiting their flowers as there would be in the spring or summer, but the ones that do have no choice but to go to the witch hazel plants. This strategy drastically increases the odds that once a pollinator has visited one witch hazel, it will go to another. In the spring or summer, chances are high that after a pollinator visits one plant, it may then buzz over and visit an entirely different species, and in doing so, waste some of the pollen it collected from the first plant. When only one plant is flowering, that is no longer a problem.

So sometimes it’s a good thing to live on your own time frame. Sure, there can be drawbacks, but there are benefits as well. Witch Hazel flowers have to be hardy to deal with cold temperatures and no protection from leaves, but they can rest assured knowing their pollen is in good hands with a good chance of producing more plants for the next year.
A Mystery in the Community - By Stephanie Sherman

All it takes is just one motivated teacher and a question: What happened here at the Delaware Water Gap National Recreation Area (DEWA)? On August 5th, I had the pleasure of hosting a workshop for eight East Stroudsburg School District teachers to answer that question. The “Authentic Learning in Your Backyard” workshop was a dream in place since 2019 and this year we were able to see it come to fruition thanks to the help of the National Park System and one very passionate teacher. The answers involved a long history of human inhabitants and exoduses that created this park.

PEEC is part of the “Parks for Every Classroom” initiative, which is a collaborative group of National Park employees, park partner organizations and local teachers. Through a mini-grant provided by “Parks for Every Classroom,” PEEC was able to provide a 2-day workshop that involved learning about some of the mysteries in the Delaware Water Gap Recreation Area and also immersed teachers in a wealth of learning from the Delaware River itself. And it was all thanks to my teacher and good friend, Pat Bixler, a former Teacher-Ranger-Teacher for DEWA and a huge advocate of getting her students outside the typical East Stroudsburg South classroom.

The first day felt similar to your typical workshop. Tables were set and PowerPoints were projected. The guest speakers, however, made the day. We welcomed Adam DePaul of the Lenape Nation of Pennsylvania to begin our day acknowledging the original land stewards of the Delaware River Basin, the Lenni Lenape. Once peaceful neighbors to the colonists under William Penn, the Lenni Lenape lived on this land for thousands of years thanks to the fertile river and forests that allowed them to take what they needed but always leave some behind for the future. The relationship soured with the Walking Purchase implemented by Thomas Penn, the son of William Penn, which pushed the Lenni Lenape westward and paved the road to modern development of the area.

Local history buff Edward Flory took the floor and story from there. The development of cities in the 1800 and 1900s made the Poconos an attractive destination. He has spent time combing local historical societies as he cataloged many local hotels and inns that helped settle the area of Dingmans Ferry, along with the local farming culture. Many of those first hotels we would never have known existed without his research, as most buildings in that age succumbed to fires. By the 1960s, what historic building remained became federal property during
the Tocks Island Dam Project as the Army Corps of Engineers planned to dam the Delaware and create a reservoir, causing a second human exodus from the land for the sake of using the river.

Most people know that the park originated from the use of eminent domain for a failed project to dam the river. Those sedimentary cores still remain by Tocks Island, which ultimately condemned the dam’s fate. However, the transfer of the land to the National Park Service did not mean that everything was suddenly at ease. Enter Larry Comisso, former DEWA Ranger, who shared his literal bin of many hats that a park ranger must wear during their time at a National Park. From helicopter scout for squatters to search and rescue dive team in the river, Larry’s stories were only a snippet of the daring feats rangers go through to keep the park and its visitors safe even to this day.

The stories put into perspective the deep history of the river as we headed out on day 2 for a beautiful day of paddling from Bushkill Access to Smithfield Beach. We got our hands dirty exploring for macroinvertebrates at the Bushkill River confluence, noting how clean the water is with the forest restored. We waved to the bald eagle nest at Walpack Bend and enjoyed the lazy rapids as we continued southward. There was even a small adventure around Depew Island to discover a washed out dumpster, reminding all of us how powerful the river can be.

Ironically, we ended where the park began. Right above Tocks Island, just below Smithfield Beach access. It always amazes me that such a beautiful river could have ended up looking much different. It’s easy to imagine the Lenni Lenape and their lives on the banks of the river as you pass each campsite now. I wholeheartedly agree with the city tourists who first journeyed to the Poconos to escape for the summer and smile at the fact that hasn’t change for over a century now. The history of this place amazes me, because the answer to “what happened here” is so much more than a simple answer. I can only hope to keep learning more about this mystery in our community.
PRE-REGISTRATION REQUIRED
Unless otherwise indicated.

TO REGISTER:
Call PEEC at 570-828-2319

OCTOBER

Nature Photography
Saturday, October 23rd
$5 | 10am-12pm
Learn some beginner techniques on how to frame a picture, and we’ll take you out to practice those skills on our campus. Great for children and those starting from scratch. Participants will need a camera for pictures, even a phone camera will do!

Introduction to Orienteering
Sunday, October 24th
$5 | 10am-12pm
Come learn how to use a map & compass on our orienteering course. We’ll show you the basics before you set out to try and find all the points. Space is limited – call early!

Ecozone Discovery Room!
Sunday, October 24th
$2 per person | 1pm-4pm
Climb into a bald eagle’s nest, crawl into a bat cave, explore a beaver lodge, and dig in a fossil pit! Explore this indoor discovery room and enjoy hands-on exhibits on natural history, sustainability and the local environment. No registration required. *Limited to 15 people at a time*

NOVEMBER

Girl Scout Badge Festival
Saturday, November 6th
$25 Full Day | 9:30am-4pm
Brownies will work on their Outdoor Adventurer & Cabin Camper. Juniors will participate in the Eco Camper badge. Cadettes will work on the Primitive Camper badge and Seniors on their Adventurer Camper badge. Overnight options are available for all ages, ask for more information! Payment is required at registration. Space is limited - call early! Overnight accommodations with meals are available for $43/person.

Intro to Tent Camping
Sunday, November 7th
$5 | 10am-12pm
Learn everything you need to know about camping right here, from basic shelters to common knots, and even how to build a fire from scratch. It’ll be great practice for any future family vacations.

Ecozone Discovery Room!
Sunday, November 7th
$2 per person | 1pm-4pm
Climb into a bald eagle’s nest, crawl into a bat cave, explore a beaver lodge, and dig in a fossil pit! Explore this indoor discovery room and enjoy hands-on exhibits on natural history, sustainability and the local environment. No registration required. *Limited to 15 people at a time*
**Flying Needles – Fiber Arts UFOs**  
**November 11th – 14th**  
$280 Full Workshop - **Call us for day rates**  
Join other crafters while finishing your knitting, crocheting, quilting, or other fiber art works-in-progress (WIPs). Or, start a new project if you are short on Un-finished Objects (UFOs). Includes lodging and meals!

**BSA Scout Badge Festival**  
**Saturday, November 13th**  
$25 **Full Day | 9:30am-4pm**  
Bears will partake in our Bear Necessities. Webelos will work on the Webelo Walkabout. Scouts will work on the Mammal Study badge. Payment is required at registration. Space is limited - call early! Overnight accommodations with meals are available for $43/person.

**Signs of Fall Hike**  
**Sunday, November 14th**  
$5 | **1pm-3pm**  
Take a hike with us and discover the science behind the wonderful season of fall. We’ll discuss changing animal behavior, why leaves change color, and why it’s the best season to be out and about!

**Bird Bonanza**  
**Saturday, December 4th**  
$5 | **10am-12pm**  
Spend the morning watching our feeders and putting together your own unique, custom-made bird feeder from a variety of recycled materials just in time for spring. We’ll provide everything you need, but you are welcome to bring your own supplies. Great craft for children!

**Ecozone Discovery Room!**  
**Saturday, November 20th**  
$2 per person | **1pm-4pm**  
Climb into a bald eagle’s nest, crawl into a bat cave, explore a beaver lodge, and dig in a fossil pit! Explore this indoor discovery room and enjoy hands-on exhibits on natural history, sustainability and the local environment. No registration required. *Limited to 15 people at a time*

**Game Dinner**  
**Saturday, November 20th**  
$35/person | **6pm-8pm**  
Enjoy the bounty of the season at PEEC’s 11th annual game dinner! This dinner features local game and seasonal harvests. Bring your friends & family to enjoy this cozy evening. *Recommended ages 14+.* Call early to guarantee a seat.

**Wacky Science Adventures**  
**Sunday, December 5th**  
$5 | **10am-12pm**  
Put on your lab coats and prepare to conduct some crazy experiments! We’ll get to create your very own slime, oobleck, and attempt to launch a rocket into space. All ages welcome.

**Holiday Bows and Boughs**  
**Sunday, December 5th**  
$20 per wreath | **1pm-4pm**  
Create your own holiday decorations using natural materials! We provide evergreen boughs and materials for you to make wreaths, swags, and table decor. Come join us as we introduce making swags from hangers. You can also bring your own supplies and decorations – we’ll bring the music, drinks, and snacks! Preregistration is required for this program.

**Winter Ecology Hike**  
**Saturday, December 11th**  
$5 | **10am-12pm**  
Learn how different plants and animals survive the winter. Join us on a hike and experience PEEC in the wintertime. All ages welcome.

**Nature Photography**  
**Saturday, December 18th**  
$5 | **10am-12pm**  
Learn some beginner techniques on how to frame a picture, and we’ll take you out to practice those skills on our campus. Great for children and those starting from scratch. Participants will need a camera for pictures, even a phone camera will do!

**Ecozone Discovery Room!**  
**Saturday, December 18th**  
$2 per person | **1pm-4pm**  
Climb into a bald eagle’s nest, crawl into a bat cave, explore a beaver lodge, and dig in a fossil pit! Explore this indoor discovery room and enjoy hands-on exhibits on natural history, sustainability and the local environment. No registration required. *Limited to 15 people at a time*