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Pocono Environmental Education Center

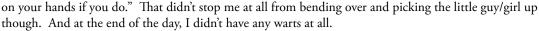
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Animal Myths- Can Toads Give You Warts?

By George Johnson

Across my career as an environmental educator, I've done my fair share of dispelling common myths involving local wildlife. There are tons of misconceptions that have formed over years from various sources, and many of them are so old that we've lost the original source. Over the next couple of newsletters though, I'll be discussing several of the more common myths that I've been asked about. For the first one, I'll be writing about the myth behind toads and if they actually give humans warts.

I actually heard this myth growing up from my mom the first time that I saw a toad. I distinctly remember her calling to me, "Don't pick up that toad. You'll get warts



The very short and simple answer is no, toads cannot give humans wart at all. Toads do have a bumpy and "wart-like" skin; however those bumps are actually not warts. Those are specialized glands that will usually secrete some sort of toxin to fend off predators. Warts, in humans, are caused by a virus. The virus infects a skin cell and causes the cell to begin multiplying out of control. That multiplication builds up over time and is what causes the bump to form on the surface.

The question of where this myth came from exactly remains a mystery. Through all of my researching, I wasn't able to find a definitive answer. This myth is just that old. The closest possible reason that I found was that people possibly just associated the bumpy features on toads as warts and believed that there was something special about toads that caused it to spread across their bodies. So, if you touched a toad then it would also spread to you and you'd end up with warts.

While it has been proven that toads do not cause warts in humans when touched, you still shouldn't go out of your way to pick them up. Toads, and all amphibians, have a very thin layer of skin. Their skin is so thin that they can actually absorb water through it. Unfortunately, water isn't the only thing that they can absorb. Sunscreen, bug spray, soap, shampoo, and other oily substances are just some of the nasty materials toads can accidently take in. Holding a toad with those on your hands can actually accidently hurt the critter.

Around PEEC, there are only two different species of toads, the American Toad and Fowlers Toad. Under the right weather conditions, they can be pretty commonly found here. However, the next time you do happen to see one, feel free to stop, say hello, and give them some space to roam!



Autumnal Equinox 2019



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Executive Director Message Fall 2019

By: Jeff Rosalsky

In these turbulent times, sharing food and drink with family and friends is something we can all relate to. Be us omnivores, vegetarians, vegans, "meat-a-tarians," pescatarians or vegetarians who also eat sausage (you know who you are) we are all drawn together by a shared meal. Of course we all need to eat to survive, but meals are as much

about the food as they are about the company, the conversation and the sense of community.

Admittedly, as I write this, I am still on a sugar/ salt/ fat high from the mini bacon and sweet corn ice cream sandwiches at PEEC's recent Farm to Table dinner. In addition to the great food, for which I am in no way responsible (sadly, I didn't even get to taste test samples this year) one of the keys is large family style tables. Typically you sit with the people you come with, as well as random strangers to fill out your table. As I watch guests interact at the dinner, I realize how much easier it is to make new friends sharing the same amazing tastes at the same moment in time.

About six years ago, I thought PEEC should have a community dinner—not a fundraiser, just a dinner where people who knew about PEEC could come, bring their friends and break bread. Trying to fit the event into PEEC's calendar, I came up with PEEC hosting a wild Game Dinner that quiet weekend before Thanksgiving. I really wasn't sure anyone would sign up, but we had 40 people that first year and now we are consistently sold out with 150. It is a mixture of locals, weekenders, transplants, house guests and, after the first course, a group of new friends.

In that first year, several people wanted some clarification as to whether the "game dinner" was a dinner with board games or if we would be serving game--venison, quail, rabbit. We also had a number of people who wanted a vegan option for the game dinner. This year I thought, why not actually have a "board game" dinner, where people play board games and we serve vegan food—thus the PEEC Vegan Board Game dinner was born.

The final of PEEC's "community dinner series" is our Farm to Table dinner, where we strive for locally sourced ingredients. After all, we are an environmental education center; why not demonstrate the principals we teach our students. Given the more limited palate of local ingredients, it challenges Erin, PEEC's amazing chef, to combine foods not normally served together—thus the inspired thyme crusted pork with strawberry rhubarb compote and the now famous sweet corn and bacon ice cream sandwiches. Our four course farm to table dinner was sold out this year, with 90 very satisfied diners. Fortunately, no fights broke out about who was allowed to take home the meagre leftovers—there was no wasted food at this meal.





Living in the Aftermath of the Ice Age

By Emma Roth

The Poconos are famous for many things: beautiful vistas, waterfalls, and plenty of opportunities for outdoor adventures. And horrific soil. As anyone who has made a garden or tried to farm in the area can tell you: it's not fun. Our soil is very thin. On average, there is about 18 inches of soil on top of our bedrock. And the soil itself is full of rocks. Some of this can be explained by the higher elevation on the mountains; our soil is easily eroded and washed down the sides of the mountains into the valleys. However, this isn't the only reason for our poor soil. To get to the bottom of this problem, we have to go back to the last ice age.

20,000 years ago, the Poconos was covered by a massive glacier. As the glacier moved across the land, it scraped the area clean. All the plants, soil, and loose rocks sitting on the surface were picked up and moved along by the glacier. When the glacier finally melted, there was nothing left behind but bare rock. The area has been in a state of recovery since then.

Soil builds up very slowly, about half an inch every 300 years. That, coupled with the constant battle with erosion we face in the mountains, means in the past 20,000 years only 18 inches of soil has built up. While usually we don't notice it, the consequences of such thin soil are occasionally seen. The thin soil layer was one of the reasons why so much damage was done during winter storm Riley in 2018. The trees simply aren't able to root themselves deep enough to withstand large storms like that.

You can still see the evidence of the glaciers while hiking around PEEC. If you come across a flat expanse of bedrock poking through the soil, stop and look for the glacial striations. These are lines carved in the bedrock by the glacier dragging stones and boulders and scraping the surface of the earth as it moved. Also look for the glacial erratics: rounded boulders sitting on the surface that were transported here by the glacier, and left behind as the glacier melted. Most of these erratics can be found in stone walls that were built as farmers found them in the soil while tilling the land.

We think of the ice age as an historical event that is long over and done with. It was a time of woolly mammoths, saber tooth tigers, and other long extinct animals. However, we are still living in its aftermath, and we will be living in it for quite a while to come.





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For twenty-one years, PEEC has run our Adventure Day Camp on our campus in the beautiful Delaware Water Gap National Recreation Area. Unlike many camps, PEEC has a focus on education and enriching our campers' connection with nature. With our miles of trails, myriad ponds and streams, and access to the 70,000 acre National Park right on our doorstep, campers at PEEC get many opportunities to experience the outdoors like never before and continue their educational experience outside of school in a fun, hands-on environment.

2019 saw our largest enrollment in years; so many campers wanted to come that we even had to restructure our age groups to make sure we could welcome as many campers as wanted to come! Word of PEEC Camp must be getting around, because for many weeks, our seventh graders, who would normally be Junior Naturalists, joined our eighth, ninth and tenth graders in the Senior Naturalists. They fit in so well, we're going to try it again next year. Our youngest campers got a new opportunity as well. Three- to five-year-olds could come as either our traditional Tadpoles age group, or they could bring a special adult with them and join the Tike Hikes, where they could adventure for part of the day with a loved one next to them.

PEEC campers come from all over. We're a short ride from Smithfield, Dingmans Ferry and Milford (where we even run a daily shuttle service for the convenience of our campers' families). Many of our campers make a daily commute from East Stroudsburg and parts of New Jersey to join in the fun. This year, we had campers from as far away as New York City and even California





stay locally and join us for much of the summer. Camp is a great way to get away from the hustle and bustle of town and city life to slow down and enjoy what nature has to offer.

Our location offers a variety of sites for field trips without getting too far from home. Many of the more overlooked sections of the Park are staples of our programming; not only do we visit the always popular Dingmans, Raymondskill, and Buttermilk Falls, but we made trips to Zimmerman Farm, Crater Lake, and Millbrook Village regularly throughout the summer. Outside of the Park, Hickory Run, Sterling Hill Mine, Luna Parc, and High Point State Park were all places that had the campers talking for weeks. Thanks to a partnership with Delaware Township, we can even regularly visit Camp Akenac to swim and a local quarry to hunt for fossils. When we weren't going out to find fun attractions, they were coming to us. We had Pocono Wildlife Rehab present local animals, Archery Addictions bring us their mobile archery range, and "Campfire" Ken Galipeau tell us some stories and sing us some songs around a campfire.

We hope all of our campers had as much fun at PEEC as we did this year! Camp is a great time to make friends and memories, build relationships, and to just have fun. Most of our campers come back each year for as many weeks as they can. We've had an amazing twenty-one years with the thousands of campers who have come through our doors, and we're looking forward to the next twenty-one years and the thousands of campers to come!











Sci Q, Summer Science, River Trips, and More! Grant Programs at PEEC

By Sheri Bone

PEEC is able to do many of its programs due to generous donations by grant funders. Among this summer's programs are Newark Summer Science in the Poconos, the Sci Q Project, and the Women On the Water/Boys in Boats programs.

Seven different Newark schools sent up to fifteen students and two chaperones for a four day/three night adventure in late June as part of the Newark Summer Science in the Poconos program. The students took classes that focused not only on the environment (wildlife study and pond ecology, for example) but they also had time to build bonds with each other in Large Group New Games and Tie Dyeing their new t-shirts. They all hiked the Tumbling Waters Trail (some of them thought they would never get back to PEEC!) and this year we were able to introduce them to canoeing. The students also

learned more about insects, animals, and plants! Most who were nervous about something in the woods reported at the end of their stay that they felt very confident about the forest now. Thank you to The Victoria Foundation and PSEG for making this trip possible for these students!

Sanofi Pasteur was once again the generous grant funder for the Sci Q Project held in late June into early July. Nineteen students from New York, New Jersey, and Pennsylvania attended this week-long experience, with most students hailing from counties around PEEC. Throughout the



week, these rising 8th-10th graders were immersed in extensive science lessons. They spent a day at East Stroudsburg University studying biology, wildlife forensics, and dissecting sheep brains and eyes. In addition to canoeing down the Delaware River through the Water Gap, these students experienced the Sterling Hill Mining Museum, a local quarry, and fireworks! While they were onsite, they made robotic arms and bottle rockets. The week culminated with the traditional team project of creating and racing Cardboard 'Boats.' We are looking forward to having this excellent program again next summer! Watch the PEEC website for 2020 Sci Q Project information after January 1, 2020.

Five different schools/organizations from the Camden and Philadelphia area each sent fifteen students for a long-term river trip. The William Penn Foundation is the generous funder of Women on the Water/Boys in Boats. The focus of each trip was not only to experience canoeing and camping along the Delaware River, but to become aware of the health of the surrounding watershed. Students conducted water quality testing, learned about local flora and fauna, and planned different projects for their local communities. These new watershed ambassadors paddled 27 miles on the river, and accomplished tasks that had never crossed their radar before! We are eager to learn about the continuing projects of these energetic groups as they share more about watershed health back home.

PEEC receives other funding from other grant sources, but a majority of the programming related to those grants occurs during the school year. Watch for updates about them in upcoming Seasons articles.









River Stories

By Stephanie Sherman and the Swarthmore "River Stories" Class

From August 18 to 25, I had the honor of leading a group of amazing Swarthmore students and their professor Betsy Bolton on a 7 day overnight river camping trip. The trip was intense and challenging, but the beautiful results of spending an immersive week together will last a lifetime. I believe that it's their words that can summarize our journey together far better than I ever could.

"We paddled, rafted, canoed & kayaked along the Delaware River from Barryville, NY to Portland, PA. Along the way we camped at all different spots. Throughout the experience, I learned how to identify different animals and plants, both native and invasive to the river. I learned a bit about how the river works. The experience of being on the river 24/7 allowed me to absorb so much of the river's beauty, so now I feel fondness and appreciation for that place. The river is a powerful and complex ecosystem and we're lucky to have it to enjoy and learn from."

"This river trip brought me and this group together by asking us to work together through some tough situations – canoeing through a headwind, pitching tents in bad weather. I learned a lot about the Delaware River by living on it/with it for 7 days. I felt familiar with the waters, like I was learning more about a new friend."

"We grew so much from topics like natural history, human development, riparian habitats, river ecology, community building, and camping 101. I also learned a lot about how

little stuff I actually need to be happy and at the very least – survive. I learned to lean on my fellow river travelers and to learn from them, and to not be afraid to share my stories and gifts with them in return. I am so grateful for all of the many moments on this trip – and I would love if more people could also partake in the adventure!"

"I would share with others the feeling of being on the river - the sound, the texture and the power of the river - with videos, words, and verbal storytelling. I would learn more about the animals and plants we saw on the trip and present a compiled map to a broader audience at Swarthmore and beyond. I would apply the same efficiency, energy, and positive attitude to my daily life wherever I live. I will always remember the many wonders I witnessed and cherish the epiphany moments we shared, whether on our path to the shower room on the last day or in the warm shelter in Alosa, because they remind me of the alternative life style outside books and concrete buildings. I will share with people the existence of this possibility to live outside our bubble. I will encourage them to walk closer to nature and listen to its unique but universal language."

"We are so caught up in the speed of our lives that we lose ourselves in that speed and the imagined "shelter" of technology. Moving with the river brings us back to ourselves, our human community, and our place 'in the universe of things' (P. Shelley). To be hungry, to be tired, to rise to challenges – these experiences, shared with others, may remind us to live more deeply into our one precious human life."

"I find it so hard these days to slow down, and to find others who will slow down with you, but that's exactly what this trip gave me: the chance to slow down, in the company of beautiful people, human and non-human, and notice and pay attention, to be present, and feel my bones. What a gift it is to live on this earth, even in these times when the future seems so uncertain, and bound to be filled with great loss and sorrow. The peace and quiet of the river works wonders."

"This trip was a very transformative experience for me because it gave me the opportunity to align myself with peace. Being on the river and living alongside it grounded me in a way I never imagined it would. Moving forward, I plan to make it a crucial part of my life schedule to take moments away from my everyday life and connect with the natural world around me with friends."

These were only the tired reflections of a final morning good-bye from some amazing students and their devoted teacher, I can only imagine what the rest of the semester holds for them as they continue to reflect and share their experience.

It was a bittersweet farewell, but my heart is filled with the hope and love these students now have for such as wonderful river and place. To Betsy, Jasmine, Orah, Emma, Alex, Isabel, Sacha, Joy, Hannah and Barb, I wish you all the best.

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Falling for PEEC this Fall

By Derek Scott

Recent polls of our user base showed that a majority of the individuals that visit PEEC come during the autumn months. Below is a description of all our most popular programs that will have you falling for PEEC this fall. We hope to see you at one (or all!) of these wonderful events.



🌽 Owl Prowl • Saturday, October 5th • 7-8:30pm

PEEC hasn't hosted an owl prowl in a number of years but we've brought back the program by request! Bring a flashlight and join us for the evening on a search around the PEEC property for different species of owls. Depending on our luck, we may not see any, but we'll definitely hear them!

Program is \$5/person

Harvest Festival • Saturday, October 12th • 11am-4pm

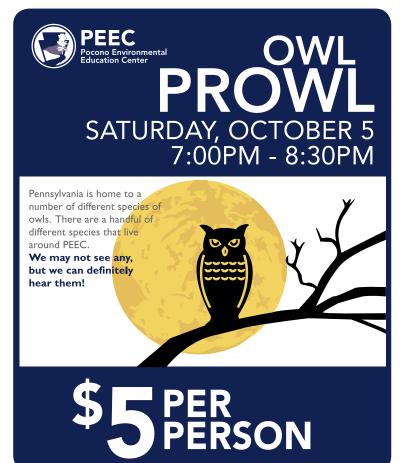
This year marks PEEC's 9th annual Harvest Festival event! Spend the day with us enjoying a variety of activities, including arts & crafts, hikes, paddling programs, conservation exhibits and an animal presentation. There will also be local music, food, and vendors throughout the event. We'll also be offering a special kayak training program led by our staff on our ponds – all equipment provided free!

Festival parking is \$5/car

Game Dinner • Saturday, November 16th • 6-8pm

PEEC's "must attend" event of the Fall. Join us for the 9th annual Game Dinner! This event features local game and seasonal harvests and is the perfect way to spend an evening with family and friends. Enjoy several courses featuring pumpkin, butternut squash, rabbit and more fall favorites! Register early though – this event has completely sold out the last 4 years!

Dinner is \$35/person





PEEC Seasons

AUTUMN PROGRAMS AND GETAWAYS

PRE-REGISTRATION REQUIRED Unless otherwise indicated.

TO REGISTER:

Call PEEC at 570-828-2319



SEPTEMBER

Ecozone Discovery Room!
Saturday, September 28th
\$2 per person | pm-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.

Fire Building Sunday, September 29th \$5 10am-12pm

Learn some primitive and modern fire making skills. Try your hand at a flint & steel fire and more! Ages 10+ please.

OCTOBER

Bridge the Gap: PEEC Bike Outing Saturday, October 5th Free Ipm-4pm

Join us for a bike ride along the McDade Trail! We will provide all equipment and transportation. Please bring a water bottle and wear sturdy footwear. We will have extra water and snacks available. Please register as soon as possible as space is limited. *Funding for this program provided by the William Penn Foundation.* Call for details.

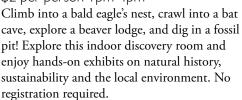
Owl Prowl Saturday, October 5th \$5 7pm-8:30pm

Pennsylvania is home to a number of different species of owls. There are a handful of different species that live around PEEC. We may not see any, but we can definitely hear them!

Signs of Fall Hike Sunday, October 6th \$5 10am-12pm

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!

Ecozone Discovery Room! Sunday, October 6th \$2 per person 1pm-4pm



Columbus Weekend Family Camp October 11th-14th Adults \$225 / 25% off ages 7-10 / 50% off ages 4-6 / Free ages 3 & under Bring your friends and family to experience PEEC in the splendor of autumn. Animal presentations, canoeing & kayaking, nature hikes, crafts, campfire and more! Price includes three nights of lodging and meals from Friday dinner to Monday lunch. Call for details.



Harvest Festival
Saturday, October 12th
\$5 per car 1 am-4pm
Celebrate Fall at PEEC's 9th 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!



Fall Photography October 18th-20th \$290 Full Workshop / Commuter rates available

Capture the beautiful fall colors of the Delaware Water Gap. Learn about exposure, composition and more. Geared towards DSLR type cameras. A tripod is recommended, but not required. Includes lodging and meals.

Girl Scout Badge Festival
Saturday, October 26th
\$30 (includes badge) 9:30am-4pm
Brownies will work on their Outdoor
Adventurer and Bugs badges. Juniors will
participate in Geocacher badge work. Cadettes
will work on the Eco Trekker badge and
Seniors on their Eco Explorer 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.

DIY Bat Box Sunday, October 27th \$20/box 10am-12pm Our local bats have been having a hard time these last few years. Give them a hand by building them a nice little house to sleep in during the day and winter.

Ecozone Discovery Room!
Sunday, October 27th
\$2 per person Ipm-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.

Continued on Page 10

PEEC Seasons

Continued from page 9

NOVEMBER

Boy Scout Badge Festival
Saturday, November 2nd
\$25 Full Day 9:30am-4pm
Bears will participate in the Bear N

Bears will participate in the Bear Necessities badge. Webelos will complete their Walkabout badge and Boy Scouts will work on the Wilderness Survival Badge (pre-req 5 & 8, please bring photos of overnight shelter). Payment is required at registration. Space is limited - call early! Overnight accommodations with meals are available for \$43/person.

Fire Building
Sunday, November 3rd
\$5 10am-12pm
Learn some primitive and

Learn some primitive and modern fire making skills. Try your hand at a flint & steel and more! Ages 10+ please.

Beginner Conservation Photography Sunday, November 3rd \$5 Ipm-3pm

Learn some beginner techniques on how to frame a picture and then apply those skills on our trails. Great for children and those starting from scratch. Participants will need a camera for pictures, even a phone camera will do!

Flying Needles – Fiber Arts UFOs November 7th-10th \$280 Full Workshop-Call us for day rates Join other crafters with Patti Shreiner 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!

Ecozone Discovery Room!
Saturday, November 16th
\$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.

Game Dinner
Saturday, November 16th
\$35/person 6pm-8pm
Enjoy the bounty of the season at PEEC's 9th
annual game dinner! This dinner features local
game and seasonal harvests. Bring your friends
& family to enjoy this cozy evening. Call early to
guarantee a seat. Reception – 5pm Main Building.

Guided Interpretive Hike Sunday, November 17th Free for PEEC Members/ \$5 for Non-PEEC Members 10am-12pm Take a hike with one of our knowledgeable staff and learn a little bit more about our forests. We never know what exactly we'll find out there, so don't be afraid to ask plenty of questions along

DECEMBER

the way.

Holiday Bows and Boughs
Sunday, December 1st
\$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.





DIY Birdfeeders
Saturday, December 7th
\$5 I Oam-I 2pm
Spend the morning putting together your
own unique and custom bird feeder from a
variety of recycled materials just in time for
winter. We'll provide everything you need,
but you are welcome to bring your own

Ecozone Discovery Room!
Saturday, December 7th
\$2 per person | pm-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.



supplies.