



**PEEC**  
Pocono Environmental  
Education Center



# Seasons

Winter Solstice 2013

A Quarterly Publication to Advance Environmental Literacy

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**Pocono Environmental  
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## Winter Astronomy

By Molly Check

*"Star bright, star light, first star I see tonight..."*

Winter is a wonderful time for star gazing. The clear, crisp nights seem to amplify the light of the stars, and the chilly time spent outside leads to a greater appreciation for the warm and cozy indoors.

When I teach astronomy programs, the majority of adults admit to feeling overwhelmed with the idea of learning the different stars and constellations. There are, after all, billions of stars in the sky, and we can usually see several thousand of them. The good news – it's a much more manageable task if you know how to approach it. Consider that there are only 88 modern constellations recognized by the International Astronomical Union. We live in the Northern Hemisphere, so that cuts the number almost in half for us. Divide that by the four seasons, and you end up with about 12 constellations per season. Not so bad, right?

As it turns out, the winter constellations are easily the most recognizable. They are bright, distinct, and they all circle Orion, the star of the show. Orion, with his shining, three-star belt, stands out against the night sky as a large, prominent, humanlike constellation. The Greeks saw Orion as a mighty hunter, as did the Hungarians and the Hittites (a Bronze Age people from the area of Turkey).

Babylonians called him The Heavenly Shepherd, and the Egyptians associated him with Osiris, their god of death, afterlife, and rebirth. Most world cultures recognized the form of a man in the shape of Orion's stars, and had different names for him and his conspicuous belt. No matter what you call him, he's pretty easy to find. If you look up towards the southern sky in the winter time, he'll be there. Early in the winter, he rises in the east and begins his westward march across the southern sky. Each night, he rises in the east a little bit earlier. By midwinter, he's directly overhead in the southern sky at peak star gazing time. If you watch for any length of time, though, you will see he's always moving forward and always



heading west. By the time spring has come and melted the snow, you'll be lucky if you catch a glimpse of Orion sliding down in the west, just after sunset.

Orion isn't REALLY moving across the southern sky, of course. Don't forget that the Earth is spinning on its axis while simultaneously spinning around the Sun. It gets a little confusing when you try to visualize how the celestial bodies are moving in relation to each other, so here on Earth, the easiest thing to do is think about how they look to us. And to us, it looks like Orion spends the winter moving languidly across the southern sky. He's easy enough to spot if you look for the three stars that make up his belt, and the four stars that serve to mark his feet and arms. One of the shoulder stars, Betelgeuse, is a red super giant star that has a reddish glow to it. When stars are red, it's indicative of their older age and cooler temperatures. Red giant stars are so large that if you place one where the Sun is, it would fill the space taken up by the Sun, Mercury, Venus, Mars, and Jupiter!

*Continued on page 8*

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## Message from the Executive Director

Jeff Rosalsky



Winter this year at PEEC will be busier than ever, with plenty of public programs to engage, entertain, teach, and exercise mind and body. A new season just provides a different perspective on nature and new opportunities for us to interact and observe. We have new and larger residential groups booked at PEEC this winter, as we are one of the few residential environmental education centers in the northeast that can accommodate so many guests all year round.

The Federal Government shutdown this fall effected PEEC very severely, as we were forced to close because PEEC sits on Federal land. This was particularly unfair, as PEEC is an independent 501 (c)(3) non-profit and does not receive Federal, or State, operating funds. We had

to cancel numerous school groups and public programs, as well as turn away hikers. The cost to PEEC was \$45,000 in lost revenue and the furloughing of staff for two weeks.

On a more positive note, PEEC's Wild Things Ball Fundraiser, held at Hotel Fauchere in Milford, to support PEEC's 21st Century Sustainability Campaign, was a tremendous success with over 100 guests. The 21st Century Sustainability Campaign is a combination of two strategies aimed at making the campus more sustainable: i) upgrading ten of our existing 1950s cabins using state of the art green building products and ii) a new Sustainability Lodge designed by Peter Bohlin (who designed PEEC's dining hall) to replace several of the older cabins on the lower campus hill. Peter's design both situates and shapes the building to conform to the landscape. It will be constructed of ultra-insulated materials and will permit students to monitor their energy usage while in residence. I encourage you to stop by PEEC this winter and see the changes and our plans, hike one of our trails or just sit in the lobby in front of the roaring fire and bird watch with a cup of coffee in hand.



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Jan. 4, 18, 25  
9am-11am  
**SUNDAY**  
Jan. 5, 19, 26  
1pm-3pm

## Tracks in the Snow

By Laura DeWolff

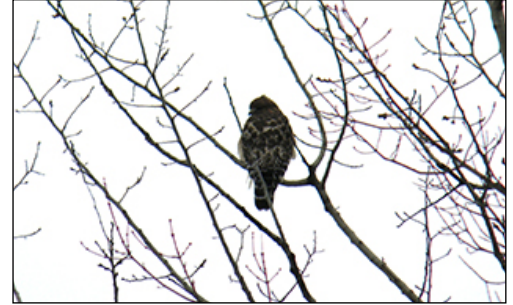
Winter seems like a quiet time at PEEC, but in reality it is very busy. While those of us who are here take advantage of modern technology and spend our energy prepping for the new year, the critters outside are busy surviving the winter. Last year's plentiful snow provided opportunities to see who was out and about.



Opossum tracks along the path behind the marsh. Here, the hind track is obscured. A typical hind track will show the opossum's opposable toe.



A squirrel left from the edge of the marsh, crossed the path, hopped over a log, and went up a white pine tree.



This red-shouldered hawk looks over the marsh on PEEC's lower campus.



The red-shouldered hawk was not the only one hunting. Domesticated house cat prints led to this dramatic snow angel created by a bird's wings.



Everybody's favorite snack! These tiny mouse tracks were found far from the water. The tracks went underneath the shelter of low-bush blueberry.



A raccoon waddled away from the opposite side of the marsh as the opossum.



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JANUARY 25, 2014**

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Join Jan Lokuta on a trip north in search of eagles. Visit the Mongaup Reservoir, the Delaware River, and the Eagle Institute to look for winter residents and nesting pairs. Bring a lunch and camera, and dress in warm layers.



# OH NO. NOT SNOW!

By Mariann Oswald

Winter's coming... okay, so winter is here. Anyway, I thought it would be fun to give you a few "fun facts" about snow. So, I googled "snow fun facts" and you'll never guess what popped up. Really, you'll never guess. So here they are, the top ten "fun facts" about snow... or not.

1. The name porcupine means 'one who rises up in anger'.
2. They are prickly creatures, each one with more than 30,000 needle-like quills on their back, sides, and tail.
3. And the list went on. While I find porcupines very interesting, as did my curious Brittany Spaniel, Ace, (once... only once) it was not the bright white fluff of winter that I so earnestly sought. Really, Google, what does this have to do with snow???

But, I did NOT give up. I continued my search and, voila!, fun facts about snowflakes and snow.

- Did you know that Chionophobia is a fear of snow? I'm not a chionophobic, per se, but might be considered an auto-chionophobic, that being a scardy-cat while driving in the snow.
- It is common knowledge that all snowflakes have six sides, says one article. I have read articles, though, which state that there are occasional flakes of the three or eight sided variety, all started by a tiny particle of dirt floating around in the atmosphere, some growing as big as 15 inches across and 8 inches thick!
- Snow is actually colorless. What little sunlight is absorbed by snow is absorbed uniformly over the wavelengths of visible light thus giving snow its white appearance. All very scientific, but, sometimes it can make it look blue, too. Whatever its color, it is pretty to look at.
- An average snowflake is made up of 180 billion molecules of water. That's a bazillion quintillion of molecules.

## And, did you know:

- Around 12% of the Earth's land surface is covered in permanent snow and ice. That's 80% of all freshwater on earth.
- And, to keep the fluff from fading away, each year an average of 105 snow-producing storms affect the continental United States alone. A typical storm will have a snow-producing lifetime of two to five days and will bring snow to portions of several states.
- Also, the average snowflake falls at a speed of 3.1 miles per hour (5 kilometers). So, how many snowflakes fall in one square mile in one day? They might know in Rochester, New York

which is touted as the snowiest large city in the U.S., averaging 94 inches of snow a year. I suppose this "fact" is based solely on averages, though, since the highest snowfall ever recorded in a one year period was 1224 inches in Mount Rainier, Washington, between 2/19/71 and 2/18/72. (That's 102 FEET!).

- I wonder if that was considered a blizzard (not of the DQ variety). A blizzard occurs when you can't see for 1/4 mile, the winds are always 35 miles an hour or more, and the storm lasts at least 3 hours. If any of these conditions are less, it is only a snowstorm. Sorry, kids, school is open.
- Oh, and here's a peculiar fact: People buy more cakes, cookies, and candies than any other food when a blizzard is in the forecast. I don't remember any blizzard's giving me a sweet tooth. I do, however, remember many a snowman building frenzy being followed by hot cocoa. Yummm.
- The largest snowman on record was built in Bethel, Maine in 2008. It was 122 feet 1 inch tall and weighed 13,000,000 pounds. The eyes were 5-foot wreaths. The biggest snowman I ever made with my kids was 8 feet tall and had elk antlers instead of a hat. We named him Garrett.

That's it for fun facts about snowflakes and snow, except for one last thing. Did you know you can make ice cream from snow? Try one of these recipes.

## Snow Ice Cream Recipe #1

This is a classic recipe that works really well because the sweetened condensed milk is thick and helps hold quickly melting snow together.

- 1 gallon or big bowl of clean snow (If you like, put the bowl outdoors to collect it as it falls.)
- 1 14-oz can of sweetened condensed milk
- 1 tsp. vanilla extract

Mix the ingredients together and eat the snow ice cream. Yummy!

## Snow Ice Cream Recipe #2

- 1 gallon or big bowl full of snow
- 1 cup sugar
- 1 tsp. vanilla extract
- 1 cup cream or milk

Again, just mix the ingredients together and enjoy! Now go, play, build a snow porcupine, and eat lots of snow ice cream. It's going to be a long winter.

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PEEC's Director of Education, Allison Owczarczak, was named the Delaware Water Gap National Recreation Area "Volunteer of the Year" for 2013.

Reprinted from Winter Solstice 1993

## "Tails" of Spring For a Winter's Day

By Jessica Steele, Marla Cohen, & Kate Monahan

They have been described as looking like spilled pepper or moving dust on the snow. Of them Thoreau wrote, they are those "whose summer prime of life is a thaw in winter". Perhaps you've seen them on a warm winter day when they've fallen en masse into footprints in the snow. What are they? Snow fleas! Little is known about snow fleas except that they are unique in both their abundance and their method of propulsion.

Snow fleas (*Achorutes nivicolus*) are a type of springtail which is a primitive, wingless insect. Springtails can be found living on the soil surface, decaying wood, pond surfaces, ocean shores, the surface of tide pools, and in the case of snow fleas, on the surface of the snow. Springtails are primarily scavengers, feeding mostly on decaying plant matter, fungi, and bacteria. While it is likely that most of us wouldn't recognize a springtail if we saw one, they are common and abundant – several million can exist on one acre of land.

A snow flea is less than six millimeters in size and is blackish-blue in color, resembling a large fleck of dust or a grain of pepper. Snow fleas are nearly invisible most of the year, but during winter thaws their existence is hard to miss. On a mild winter day, they can be found in teeming masses on the surface of the snow where they are taking advantage of warm spots.

Snow fleas are not actually fleas, although they do resemble the insects both in size and by the way they appear to jump. Rather than jumping however, snow fleas catapult themselves into the air using an organ called a furcula. This organ resembles a fork in shape, and is hinged at the straight end to the underside of the insect's abdomen. The forked end of the furcula is held tightly by two small clasps, and when the clasps are released, the furcula springs open and pushes against the ground. This causes the snow flea to spring, often several inches, into the air.

The next time you're out walking on a mild winter day take a closer look at that moving patch of dust, you may be surprised by what you see!



## EcoZone! Award

PEEC's EcoZone! was recently awarded First Place in the Education Category of the 2013 Nonprofit & Community Assistance Center Awards. The mission of the Nonprofit & Community Assistance Center is to strengthen and support northeastern Pennsylvania's nonprofit organizations and grant makers in their service to our region. NCAC develops and offers resources, facilitates partnerships and collaborations, and assists in the identification and implementation of governance and management best practices to improve the efficiency and effectiveness of organizations and the services and programs they offer.

The NCAC Community Awards Program was established to highlight and acknowledge the organizations that improve the quality of life within the seven-county region of Carbon, Lackawanna, Luzerne, Monroe, Pike, Schuylkill and Wayne counties. The judging panel was comprised of community leaders representing NCAC's primary service area (Carbon, Lackawanna, Luzerne, Monroe, Pike, Schuylkill, and Wayne counties). Applications were judged and ranked based on the following criterion: Fulfillment of Community Need; Innovation; Partnership, Collaboration & Endorsements; Resource to Accomplishments Comparison; Impact on Community/Quality of Life, Measurability & Sustainability; and Quality of Application.



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## Wild Things Ball

PEEC's first annual "Wild Things" Ball, held Saturday November 2 at the Hotel Fauchere in Milford, was a great success. Over 100 people attended to launch PEEC's 21st Century Sustainability Campaign and raised approximately \$45,000 net of expenses. According to Rebecca Lindsey, a member of the event committee, "We could not be happier with the outcome. We exceeded our goals for attendance and fundraising, but most importantly, we wanted to have an event that was both beautiful and fun, so that people will want to come back year after year. Thanks to the hard work of many volunteers and the Fauchere staff—not to mention a great band-- I think we succeeded." Jeff Rosalsky, PEEC Director, added, "PEEC is a private non-profit organization, dependent for most of its support on private fundraising. Since we receive no government funding, events like this one make a critical difference in our ability to undertake capital improvements."



PEEC's 21st Century Sustainability Campaign has as its centerpiece a new Sustainability Lodge, designed like PEEC's dining hall by architect Peter Bohlin. Bohlin attended the Wild Things ball and spoke about his vision for the Lodge. He also provided a sketch of the Lodge for the event auction. Many other local businesses and individuals also donated to the auction, which was conducted by Sean Strub of the Fauchere.

Randy Auman and Jim Vandevender of Milford were responsible for the event décor.



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NOVEMBER 2, 2013 | HOTEL FAUCHERE

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## Sustainability at Home – What YOU Can Do!

By Sheri Bone

'Sustainability' is the current buzz word. People tout that they are 'green'. Some talk about reducing their carbon footprints. What does 'sustainability' actually mean?

There is no universally agreed upon definition of what sustainability means. There are many different views on what it is and how it can be achieved. To me, an environmental educator, being sustainable means deliberately taking care of natural resources (water, air, land, trees, etc.) so those resources will be available for the future generations. By wisely taking care of them now, the resources will be in good shape – not polluted and in an adequate amount – for the future.

Developing a sustainable lifestyle starts with awareness. When used in reference to the 'reduce, reuse, recycle' model, I focus on 'reduce': cutting down on waste and pollution; using less electricity which is produced by limited and polluting resources; and paying attention to habits that can be modified. Sometimes the changes can be relatively easy; others take more effort.

In PEEC's EcoZone, there is an Energy Bike Display. Generators are hooked up to bicycles and when people hop on the bike and begin pedaling, electricity is produced. Appliances are hooked up to the display. Lights can be switched on, fans run, and a small blow dryer can produce heated air.

What is shown in this display is that the more heat an appliance creates, the more energy is needed to create that heat. Three cyclists together have yet to pedal hard and fast enough to keep the blow dryer going longer than a few seconds.

While I personally would like to have all of my electrical energy being produced by the sun, water, and wind (renewable resources), I don't have the financial resources to have solar panels on my roof or wind turbines in my yard. Some renewable sources of energy are being used by my electricity supplier, but a majority of the

electricity that is delivered to my home comes from coal that is burned. Think air pollution. Think coal mining. These are not 'green' thoughts. Cutting back on electricity use is one way to begin a sustainable lifestyle, and it's easy to begin by limiting the use of heat creating appliances.

What appliances are those? Think of a kitchen first. Stoves, ovens, microwaves, coffee makers, toasters – these all produce heat. Instead of keeping a coffee maker on all morning, after the coffee is made, put it in a thermal container and turn off the machine. Make a full meal in the oven at the same time instead of using the stovetop AND oven. Be creative as you find ways to cut back on using those appliances.

In the laundry room, if clothes are washed using hot water, an easy solution is to use warm or cold water. The dryer can be eliminated completely and a clothesline used. (I hang out laundry all year and even hung out cloth diapers, in summer and winter, when my kids were babies!) There are communities that ban the use of clotheslines. If you live in one of those communities, work to get that ban eliminated. If your community wants to be known as 'green' and kind to the environment, it should not prohibit the practice of sun drying the laundry.

Hot water heaters use a lot of energy. Cutting back on shower times is one way to limit hot water use. (And after the shower, let Mother Nature dry your hair!) Make sure dishwashers are full before running them. Hot water heaters can be put on timers and temperatures should be between 120 – 140 degrees.

Most of the energy that is used in a residential setting is related to heating and cooling homes. (Even though air conditioners are not creating heat, removing heat uses a lot of energy, too.) Insulation (in attics, walls, and basements), caulk (around leaky doors and windows), and weather stripping are just a few affordable ways homeowners can become more sustainable and lower energy bills at the same time.

Paying attention to energy use does not mean just inside the house. Fuel used in most vehicles comes from a limited (and polluting) resource. As a society, we hop in the car and zip down the street. I live in a community that is not located near any store. My mail is delivered to a spot about a mile away from my house. Planning ahead for shopping trips and stops at the mailbox help to extend the fuel in my gas tank. Walking to get the mail on nice days when I hadn't planned to drive the car is one way to get some great exercise and use less gasoline.

Composting (and then gardening) is another way to be sustainable. Using kitchen scraps (that would otherwise be thrown out) in a compost pile helps cut down on garbage. Eating home grown vegetables and fruits that have used compost as the soil amendment (with little or no pesticides or fertilizers) means less pollution from runoff after a rain.

If there isn't room for a garden, plan to buy locally grown produce. Less fuel (gasoline and diesel) was used to get those fruits and vegetables to the neighborhood market than what was used to ship similar items from other states and countries to the grocery store.

Being careful with resources isn't just about energy and electricity. There is the piece about using only what is needed. In the United States, we are a throw-away society. We buy more stuff than we need. (There is a big difference between needs and wants.) We have to have the biggest and newest, even if the smaller, older version that we own still works well. Saying 'no' to the pressure of having new stuff can be more difficult than cutting back on energy use.

'Sustainability' means looking at the whole environmental picture. Every bit that is done to take care of existing resources by using only what is needed and switching to renewable, non-polluting ones means a better future. Our society becomes 'greener.' Carbon footprints are reduced. It's not always easy. But it is very important.



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## For the Love of Winter

By Allison Owczarczak

It takes a special breed of person to love winter. It can be cold, harsh, and cruel, but it also can transform the woods into a different kind of play land for an outdoor enthusiast.

While some people may be resigned to sitting by a fire or woodstove or under a pile of blankets to escape the cold, there is a secret counter culture that would like to recruit them. At PEEC, we love sharing the outdoor world with people, and that includes in the wintertime.

Our programming shifts from sandal-friendly hikes to strapping on snowshoes or cross county skis in the winter. Our Family Fishing

programs continue as Intro to Ice Fishing. We also have our Winter Hibernation Hikes and Eagle Watch tours.

PEEC is the perfect testing ground to see how much you, too, can enjoy winter. We supply the equipment for you to learn on and test out. We give thorough instruction on the “how to.” We can also make recommendations for purchasing the right kind of equipment if you liked what you experienced with us.

Even though winter is upon us, we need the right conditions for our programming to commence. Here is a brief guideline for some favorites:

**Cross Country Skiing:** We need a minimum of 4-6 inches of snow on the ground. If we receive 4 inches of snow, not all of it hits the ground on our trail in the pine forests and sometimes

the ground is actually bare. Temperature is also important. Warming snow is wet and sticky and not conducive to skiing.

**Snowshoeing:** We need at least 8-10 inches of snow on the ground to not damage the shoes themselves and to actually utilize their design function, which is to help users stay “afloat” on the snow.

**Ice Fishing:** We follow the PA Fish and Boat Commission’s recommendation of having at least 7 inches of ice on the pond. Snow on top of a layer of ice will insulate it and will inhibit the growth of the ice. Also, when rocks and branches are thrown out on the ice, those objects weaken the ice as they absorb the sun’s energy (black body radiation) and melt the ice around themselves.

## Winter Astronomy

Continued from page 1

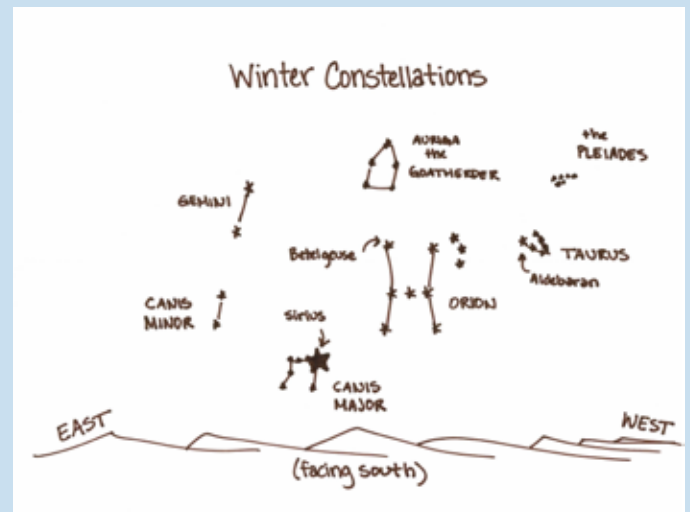
When I first started gazing in awe at the night sky, my mentor, Jeff Boland, taught me about “star jumping.” The easiest way to find your way across the night sky is to learn one star or constellation that you can always find. From there, the stars are laid out on a predictable map. For example, if you can find Orion, then the rest of the winter constellations will fall smoothly into place.

Orion, the mighty hunter, travels with Sirius, his hunting dog. Sirius, known as the Dog Star, is the brightest star in the entire night sky, and is part of the Canis Major (big dog) constellation. Canis Major is just down and to the left of Orion’s left foot. A second hunting dog, Canis Minor (little dog), is marked by two stars and is found just above and slightly to the left of Sirius. If you continue this curve, up and to the left, you start a circle of constellations that are found around Orion. Above Canis Minor is Gemini, the twins of the zodiac world, made up by the stars Castor and Pollux. The Gemini constellation looks very similar to Canis Minor, although it’s always higher in the sky, and the stars are brighter. From here, the curve breaks to the right and finds Auriga, the Goat Herder, marked with the bright star Capella.

The last two constellations in this winter circle of stars are found just ahead of Orion. The Greeks had stories for these as well, primarily of Orion chasing one, or both, of these constellations across the sky. The Pleiades is a group of seven stars that are commonly called the seven sisters. Just below the Pleiades is Taurus, the mighty Bull of the zodiac. Taurus is found to the top right of Orion and contains another red giant star, Aldebaran. Orion may or may not be hunting the bull or chasing the girls, but his constellation certainly follows both of them across the southern sky to set in the west. If you take the brightest stars from this circle of constellations, they are known as the Winter Hexagon, and have been used by intrepid travelers for millennia.

Each star, each constellation, offers us a glimpse into the universe. There are countless mythological stories, from many different cultures, that explain the positioning and movement of the stars. Don’t like their stories? You can make up your own! If you’re interested in learning more about astronomy, start small. Buy a star map, or print one from online. This winter, try to find Orion in the southern sky, and watch him move from east to west over the course of the season. Any one night of star gazing can be overwhelming, but if you go out night after night, you will quickly come to recognize the patterns and constellations of the winter sky. Happy star gazing!

PEEC offers Astronomy programs throughout the year. Call 570-828-2319 or email [peec@peec.org](mailto:peec@peec.org) to register.





# WINTER PROGRAMS AND GETAWAYS

**PRE-REGISTRATION  
REQUIRED  
Unless otherwise indicated.**

## TO REGISTER:

Call PEEC at 570-828-2319  
with credit card information available

## JANUARY

### Cross Country Skiing

Saturday, Jan. 4, 18, 25

(9:00-11:00am) and

Sunday, Jan. 5, 19, 26

(1:00-3:00pm)

Cost: \$20 adult / \$10 child

Enjoy the winter woods with beginner ski lessons. Learn the basics of cross country skiing and practice on an old logging road loop. You decide how many loops to ski. Skis, poles & boots provided - register w/shoe size to guarantee a spot.

### Ecozone Discovery Room!

Saturday, January 4

1:00-4:00pm

Cost: \$2 per person

Climb into a bald eagle's nest, crawl into a bat cave, 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.

### Winter Bird Walk

Saturday, January 4 – 2:00-4:00pm

Cost: \$5

Celebrate our winged friends! Join Darryl Speicher, from the Pocono Avian Research Center, for a short hike on the Two Ponds trail. Learn about the variety of winter residents that you see at bird feeders. Binoculars & field guides provided.

### Christmas Bird Count

Sunday, January 5 – 8:00am Start

Cost: Free

It's the National Audubon Society's 114th annual Christmas Bird Count! The longest running Citizen Science survey in the world, the Christmas Bird Count provides critical data on population trends. You can register for the area around your house and participate from the comfort of your living room, or you can venture out into a different part of the count circle. If you're a beginner, we'll pair you up with a more experienced birder. Pre-registration is required for this event.



### Sunday for Singles

Sunday, January 5 – 1:00-3:00pm

Cost: Free

Enjoy a guided hike on a PEEC trail. This program is all about exploring nature and meeting new people.

### Introduction to Snowshoeing

Sunday, January 12 – 1:00-3:00pm

Cost: \$10

Learn the basics of snow shoes and enjoy a winter stomp through the woods. No experience necessary – we provide the equipment and teach you everything you need to know. Register early to guarantee a spot.

### Winter Waterfalls

Sunday, January 12 – 1:00-3:30pm

Cost: \$12

This is a great time of year to enjoy the waterfalls. See them as they cascade down through chunks of frozen ice and snow. Dress warm, wear sturdy boots, and bring a camera! Call to reserve a seat in the van.



### Family Ice Fishing

Saturday, January 18 – 1:00-3:30pm

Cost: \$10 child / \$5 adult

Learn the basics of ice fishing and try your luck on our ponds. We provide all of the equipment. Dress in warm layers. No fishing licenses required. Spaces limited. Call to reserve a spot.

### Animal Tracking

Sunday, January 19 – 10:00am-12:00pm

Cost: Free for members / \$5 for non-members

Animals leave behind clues that give us glimpses into their lives. Explore our natural areas for tracks, trails, scat, territory marks, eat marks, and other signs that animals leave as they travel through the fields and forests of the Poconos.

### Ecozone Discovery Room!

Sunday, January 19 – 1:00-4:00pm

Cost: \$2 per person

Climb into a bald eagle's nest, crawl into a bat cave, 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.

### MLK Jr. Day of Service

Monday, January 20 – 9:00am-12:00pm

Life's most persistent and urgent question is 'What are you doing for others?' – MLK Jr. Start the year off right – become involved with our volunteer program! All ages welcome. Snacks provided.



*Continued on Page 10*

# WINTER PROGRAMS 2014 AND GETAWAYS

## JANUARY CONT.

*Eagle Watch for Eagle Enthusiasts!*  
Saturday, January 25 – 8:30am-3:30pm  
Cost: \$20

Join Jan Lokuta on a trip north in search of eagles. Visit the Mongaup Reservoir, the Delaware River, & the Eagle Institute. Bring a lunch, camera & warm clothes. Includes a special stop at “Eagle Day” at the PPL Environmental Center!

*Little Eco Explorers: Black Bears*  
Saturday, January 25 – 1:00-2:30pm  
Cost: \$5 per child

It's a new program for 3-6 year olds! Join us for a story, craft, and activity focusing on a particular critter. Call for details.

*Introduction to Snowshoeing*  
Saturday, January 25 – 1:00-3:00pm  
Cost: \$10

Learn the basics of snow shoes and enjoy a winter stomp through the woods. No experience necessary – we provide the equipment and teach you everything you need to know. Register early to guarantee a spot.

*Animal Tracking*  
Saturday, January 26 – 10:00am-12:00pm  
Cost: Free for members / \$5 for non-members  
Animals leave behind clues that give us glimpses into their lives. Explore our natural areas for tracks, trails, scat, territory marks, eat marks, and other signs that animals leave as they travel through the fields and forests of the Poconos.

## FEBRUARY

*Cross Country Skiing*  
Saturday morning – 9:00-11:00am  
Sunday afternoon – 1:00-3:00pm  
\*EXCEPT February 2, February 15, and February 16  
Cost: \$20 adult / \$10 child  
Enjoy the winter woods with beginner ski

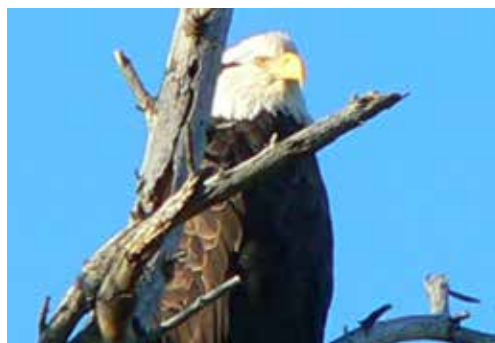
lessons. Learn the basics of cross country skiing and practice on an old logging road loop. You decide how many loops to ski. Skis, poles & boots provided - register w/shoe size to guarantee a spot.

*Ecozone Discovery Room!*  
Saturday, February 1 – 1:00-4:00pm  
Cost: \$2 per person

Climb into a bald eagle's nest, crawl into a bat cave, 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.

*Eagle Watch*  
Sunday, February 2 – 9:00am-3:00pm  
Cost: \$20

Join Jan Lokuta on a trip north in search of eagles. Visit the Mongaup Reservoir, the Delaware River, and the Eagle Institute to look for winter residents and nesting pairs. Bring a lunch, camera, and warm clothes. Call to reserve a seat in van.



*Vegetable Gardening Weekend!*  
February 8-9

Cost: \$150 includes lodging, meals, and programming  
Join us for a weekend full of great gardening information. Learn how to design, prepare, and cultivate a vegetable garden. Classes taught by the Pike County Master Gardeners. Commuter and day use rates available – call for details.

*Animal Tracking*  
Saturday, February 8 – 10:00am-12:00pm  
Cost: Free for members  
\$5 for non-members  
Animals leave behind clues that give us glimpses into their lives. Explore our natural areas for tracks, trails, scat, territory marks, eat marks, and other signs that animals leave as they travel through the fields and forests of the Poconos.

*Winter Waterfalls*  
Sunday, February 9 – 1:00-3:30pm  
Cost: \$12

This is a great time of year to enjoy the waterfalls. See them as they cascade down through chunks of frozen ice and snow. Dress warm, wear sturdy boots, and bring a camera! Call to reserve a seat in the van.

*“Winter Wonderland” Family Nature Getaway Weekend*

President's Day weekend: February 14-17  
Cost: Adults \$210 / 25% off ages 7-10 / 50% off ages 4-6 / free under 3

Bring your friends and family to experience PEEC in the wintertime. Cross country skiing, animal tracking, nature hikes, crafts, campfire and more! Price includes three nights of lodging and meals from Friday dinner to Monday lunch. Join us for a wonderful winter weekend! Commuter and day rates available – call for details.

*Family Ice Fishing*  
Saturday, February 22 – 1:00-3:30pm  
Cost: \$10 child / \$5 adult

Learn the basics of ice fishing and try your luck on our ponds. We provide all of the equipment. Dress in warm layers. No fishing licenses required. Spaces limited. Call to reserve your spot!

*Primitive Fire Building*  
Sunday, February 23  
10:00am-12:00pm  
Cost: \$5

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

*Sunday for Singles Nature Hike*  
Sunday, February 23  
1:00-3:00pm  
Cost: Free

Enjoy a guided hike on a PEEC trail. This program is all about exploring nature and meeting new people.

*Ecozone Discovery Room!*  
Sunday, February 23 – 1:00-4:00pm  
Cost: \$2 per person

Climb into a bald eagle's nest, crawl into a bat cave, 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.