

## “T Back from the Brink

Trisha O’Neill, ASWP Director of Education

Trisha, I think I’ve spotted a Bald Eagle, right here in Fox Chapel!” The excited voice I heard over the phone at my desk was Martha’s, a longtime friend of ours here at ASWP. “I’m in my new house right along the Allegheny River and it’s across the lagoon on a wooden post, just sitting there. I can see its white head, but it’s too far away.” “Can you see its tail or the color of its feet?” I asked. I squinted my eyes as I said this, as though willing the gesture to force Martha’s eyes to see the bird more clearly. “Darn. I just can’t.” I could hear her frustration. “Let me call you back.” She hung up the phone. I placed mine back in its cradle, wondering if, or when, I’d hear back from her.

Fifteen minutes later, the phone rang. It was Martha. She sounded winded. “Trisha, I’m on the other side of the lagoon. It’s really a Bald Eagle! I can see its head, its tail, its feet, everything! I can’t believe it! It’s just perching looking out at the river. What is it doing here? I can’t recall ever seeing them so close to Pittsburgh. Anyway, I really must go. I was so excited I ran all the way here without my coat! I didn’t even feel the cold!” I laughed, and congratulated her on her find. While Bald Eagle sightings in Pittsburgh are becoming more and more common, this certainly wasn’t the case for a very long time.

In the lower 48 states, Bald Eagles have staged a remarkable recovery from the brink of extinction. According to the latest population surveys, the eagle population in the lower 48 states has climbed from an all-time low of 417 nesting pairs in 1963 to an

estimated modern high of 9,789 breeding pairs today. Here in Pennsylvania, there are now over 200 nesting pairs, up from an extreme low of 2 nesting pairs in the state in the 1970’s. To fully comprehend the Bald Eagle’s success so far, and sustain its survival, human beings—both adults and children—must gain an understanding of and learn from the factors which have influenced the Bald Eagle’s demise and recovery.

Bald Eagles were common in America at the time of the European settlers. But as the population of settlers increased, humans were able to out-compete the Bald Eagles for shared food sources via hunting and fishing. In addition, logging and mining practices here in Pennsylvania, and the general human migration westward decreased Bald Eagle natural habitat. By the late 1800’s, the population of Bald Eagles suffered a sharp decline.

Throughout the early 20th century, Americans were becoming more aware of the Bald Eagle’s plight. In 1940, congress passed the *Bald Eagle Protection Act*, designed to prohibit the taking, possession and commerce of both the Bald Eagle and Golden Eagle. Regardless, by the 1950’s, Bald Eagle populations suffered an even greater decline due to the widespread use of agricultural pesticides like DDT which found its way up the food chain to accumulate within the bodies of the Bald Eagle, rendering them infertile, or their eggs unviable.

The number of nesting pairs in the lower 48 states became so low (only 400 nesting pairs were found in

## Schoolground Studies

**Save the date to save Pennsylvania wildlife by restoring your school ground!**

**Thursday, May 20, 2010**

## **Schoolground Habitat Enhancement & Restoration Symposium 7**

**Learn how students, teachers, administrators**

**& communities have**

**worked together to**

**improve the habitats of**

**local schoolgrounds &**

**gather tips for beginning**

**or renewing your own**

**school ground restoration**

**project. Indoor/outdoor**

**breakout sessions and**

**experiential learning**

**classes embrace the**

**beauty and natural**

**resources of Beechwood**

**Farms Nature Reserve.**

**Registration materials will be available in Spring**

**2010.**

the contiguous U.S. in 1963), that in 1967, the Bald Eagle, the national emblem of the United States of America, was declared an Endangered Species in the U.S., through a federal law which predated the landmark *Endangered Species Act (ESA)* of 1973. In 1972, the use of DDT was made illegal in the U.S., and the Bald Eagle was officially listed as an Endangered Species under the *ESA* on July 4, 1976.

The Bald Eagle remained an Endangered Species throughout the next 2 decades. By July 1995, something wonderful happened—the Bald Eagle had made a comeback. That year, the United States Fish and Wildlife Service upgraded the Bald Eagle to a Threatened Species under the *ESA*. Human efforts to curb practices harmful to the species appeared to be working.

On June 28, 2007, something even more remarkable happened—the Bald Eagle was removed from the official federal list of threatened and endangered species (except in the Sonoran desert area of Arizona, where it is still listed as Threatened). Citing a 25-fold increase in nesting pairs in the lower 48 since 1967, equating to 20,000 birds, the Secretary of the Department of the Interior expressed his confidence in the future of the Bald Eagle and in the conservation efforts of government and non-government entities working in partnership.

In Pennsylvania, the Bald Eagle remains on the state's Threatened Species list. The hope is that nesting pairs will continue to proliferate to the point where the species can be removed from the state list.

The goal now is to ensure that the Bald Eagle never again becomes a listed species under the *Endangered Species Act*. Although no longer protected under the *ESA*, the Bald Eagle continues to receive protection under laws like the *Bald Eagle Protection Act* and the *Migratory Bird Treaty Act*. In addition the U.S. Fish and Wildlife Service released the *National Bald Eagle Management Guidelines* providing guidance to the public as to how to prevent impacts to Bald Eagles that could violate the *Bald Eagle Protection Act*. They are also proposing to establish a permit program that would allow for limited take of eagles for approved land management activities.

According to *The American Bald Eagle Information Website* ([www.baldeagleinfo.com](http://www.baldeagleinfo.com)), eagles still face threats from human impacts, including accidental and intentional shootings; electrocution from power lines, lead poisoning from eating wounded game animals which eluded the hunter and later died; ingesting poisoned meat used to bait wolves and coyotes; and collisions with vehicles

The Bald Eagle is a true conservation success story. But many other species of birds and wildlife here in Pennsylvania continue to need our help. Assist your students to research the plight of avian species such as the Northern Bobwhite, Eastern Meadowlark, Cerulean Warbler, or Wood Thrush. The more we learn of the history of these species, the better equipped we will all be to assist them away from the brink of extinction.

### References

[www.baldeagleinfo.com](http://www.baldeagleinfo.com)

[www.fws.gov](http://www.fws.gov)



# Professional Development

**An Act 48 Approved Provider, Audubon Society of Western Pennsylvania (ASWP) utilizes the resources of our nature reserves, schoolyard habitats, and other natural areas to provide educational tools and strategies to assist educators in meeting Pennsylvania's Academic Standards for Environment & Ecology and Science & Technology. We assist PA certified teachers to accrue Act 48 hours when they participate in ASWP professional development courses and support the professional training of those entering the field of environmental education.**

**All events take place at Beechwood Farms Nature Reserve, Fox Chapel**

## **Adult Eco-Series**

### **Great Backyard Bird Count**

**Saturday, February 6**

A project of Cornell Lab of Ornithology and National Audubon Society, Great Backyard Bird Count invites participants to count the numbers and kinds of birds that visit backyard feeders, local parks, or school yards on any or all count days. This training will introduce you to the program, and assist in developing bird identification skills. Bird identification aids are provided.

**2 Act 48 hours**

**Ages: Adults**

**\$2 per member; \$5 per nonmember**

**Beechwood Farms Nature Reserve, Fox Chapel**

**10:00 am – 12:00 pm**

**Contact ASWP at 412-963-6100 to register**

### **Food, Land and People**

**Saturday, February 20 and 27**

Food, Land & People is an interdisciplinary curriculum addressing the interdependence of food production, environmental quality, and the sustainability of human cultures. Today, less than two percent of Americans live or work on farms, and mainstream education provides little information about the links between food production and its connection to population, soil, water, energy, and habitat preservation. This program uses a variety of skills to teach students how to apply the knowledge base they have learned about food and fiber into their everyday lives. Activities emphasize the development of critical thinking skills needed to balance an understanding of the complex interdependence of food systems and environmental conservation. It can be infused into other areas beyond

environment and ecology, such as science, language arts, social studies, reading, mathematics, economics, and technology. Participants should bring a bag lunch and dress for the outdoors.

**1 credit/15 Act 48 Hours**

**AIU Course--Fee charged**

**Beechwood Farms Nature Reserve, Fox Chapel**

**8:30 am – 4:30 pm**

**Visit [www.aiu3.net](http://www.aiu3.net) for information and registration.**

## **Adult Eco-Series**

### **The History of Barn Owls**

**Saturday, March 13**

Discover the fascinating natural history of barn owls, meet ASWP's resident owls, and learn about our Barn Owl Nest Site Fidelity research project.

**2 Act 48 hours**

**Ages: Adults**

**\$2 per member; \$5**

**per nonmember**

**Beechwood Farms**

**Nature Reserve, Fox Chapel**

**10:00 am – 12:00 pm**

**Contact ASWP at 412-963-6100 to register**



Photo: Wikimedia Commons

## **ASWP Volunteer Naturalist Training**

**6 Mondays beginning Monday, March 15, 2010**

A great opportunity for educators on sabbatical, pre-service educators, substitutes, and other part-time teachers to strengthen their knowledge and skills in environmental education, this program trains adults to assist school students (ages 4-18

# Professional Development

years) in understanding and appreciating the natural habitats and unique species interactions found in southwestern Pennsylvania.

**30 Act 48 Hours**

**Free**

**Beechwood Farms Nature Reserve, Fox Chapel**

**9:30 am – 2:30 pm**

**Contact Scott Detwiler at 412-963-6100 ext. 20 for further information and registration**

## **Pennsylvania Songbirds**

**Saturday, April 17 and Saturday, April 24 2010**

Incorporate the study of birds into your curriculum through Pennsylvania Songbirds, an interdisciplinary environmental curriculum focusing on Pennsylvania bird species and habitats. The K-12 resource guide contains over 50 activities organized into 7 engaging chapters devoted to biology, ecology, field studies, research and more. Utilizing the unique resources of Beechwood Farms Nature Reserve, participants will learn background information on our state's songbirds as well as participate in many of the multidisciplinary activities from the curriculum. Participants should dress for the outdoors (comfortable shoes that may get dirty are a must!) and bring a bag lunch.

**1 credit/15 Act 48 Hours**

**AIU Course--Fee charged**

**Beechwood Farms Nature Reserve, Fox Chapel**

**8:30 am – 4:30 pm**

**Visit [aiu3.net](http://aiu3.net) for information and registration.**

**Adult EcoSeries are offered monthly throughout the year. Visit [aswp.org](http://aswp.org) for additional dates, times, and topics, as well as additional workshop opportunities.**

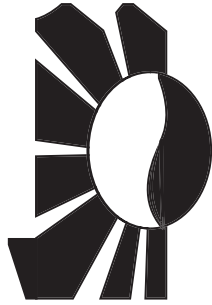


American Goldfinch. Photo: Brian Shema

## **Upcoming Classes and Courses**

<b>May 1 &amp; 8, 2010</b>	<b>Amazing Insects Workshop (1 credit/15 Act 48 hours) in partnership with the Carnegie Museum of Natural History</b>
<b>May 20, 2010</b>	<b>Schoolground Habitat Enhancement and Restoration Symposium (6.5 Act 48 hours)</b>
<b>June 2010</b>	<b>Natural History for Educators Course (2 credits/30 Act 48 hours)</b>

# Across the State



**Save the Date!**  
**PAAE Conference 2010**  
**A Sense of Place — Our Outdoor Heritage**  
**March 12–13**

Be sure to mark your calendar for the Pennsylvania Association of Environmental Educators 2010 Conference. Take advantage of this unique opportunity to enjoy hands-on workshops, important guest speakers, and exciting field studies in the surrounding region.

And this year's field studies are sure to please, as the conference will take place at Normandy Farms, in scenic eastern Pennsylvania. Listed on the National Register of Historic Places, this beautiful hotel and conference center is near Philadelphia's historic attractions, Valley Forge National Historic State Park, and Hershey Park.



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## **SAVE THE DATE!**

*A symposium for educators and interested others. . .*

### **PENNSYLVANIA'S WILD RESOURCES**

**Tuesday, August 17, 2010**

**8:30 am – 3:00 pm**

**Luthertown, Prospect, PA**

Broaden your knowledge of Pennsylvania's native flora and fauna, learn about important research and protection programs, meet environmental education resource providers in western Pennsylvania, and inspire students to become more environmentally literate.



*A cooperative program brought to you by the Western Pennsylvania Nature Center Roundtable*

Registration materials will be available **Spring 2010**

# Special Opportunities

## **Nominate a deserving teacher today!**

### **Betty Abbott Excellence in Teaching Award**

Presented annually, ASWP's Betty Abbott Excellence in Teaching Award recognizes a southwestern PA classroom teacher who uses environmental education to inspire students to become responsible stewards of the natural world. Nominations are accepted throughout the year, and the award is presented at ASWP's annual meeting in late Spring. One-page nominations should include contact information for both the nominee and nominator, and should describe how the nominee inspires environmental stewardship through education. Please send nominations to: Betty Abbott Award Nominations, Audubon Society of Western PA, 614 Dorseyville Rd., Pittsburgh, PA 15238 or [toneill@aswp.org](mailto:toneill@aswp.org) (subject heading: Betty Abbott Award Nomination).

## **Scholarships available for college-bound graduates**

### **Beulah Frey Environmental Scholarship**

ASWP awards \$1,000 scholarships to graduating high school seniors from Allegheny, Armstrong, south Butler, Beaver, north Fayette, northeast Washington, and Westmoreland counties. Students applying to two or four-year colleges to further their studies in an environmentally-related field are eligible to apply. All applications must be postmarked on or before March 31. Scholarships are presented at ASWP's annual meeting in late Spring. Applications are available beginning in January at [aswp.org](http://aswp.org) or through your school's guidance office.

## **Special program only in March**

### **Maple Sugaring: Tapping Through Time**

Offering a maple sugaring unit in your classroom is a fascinating way to blend science and history to tell a story that is unique to our part of the world. *But it is even better in person.* Bring your students to Beechwood Farms Nature reserve to see it all first hand in our educational sugar bush.

During this 2 hour outdoor program, you'll experience the thrill of turning sap into sugar through our integrated botany, chemistry, physics and history program! Students will discover how the art and science of making sugar has developed through the years, manipulate the equipment used through history and warm up by the evaporator stove in our sugar shack. Along the trails, students will identify maple trees and explore their natural history.

**\$8.00 per student (\$135 minimum)**

**To schedule your program, contact Scott Detwiler at 412-963-6100 x20**

## **Elementary GLOBE Workshop at Beechwood Farms Nature Reserve**

**June 23 and 24, 2010**

Conducted by the PA NASA Educator Resource Center (ERC), Pittsburgh Regional Center for Science Teachers and ASWP staff, this workshop is designed to introduce K-4 students to the study of Earth System Science (ESS). Elementary GLOBE forms an instructional unit comprised of five modules that address ESS and interrelated subjects including weather, hydrology, phenology, and soils. Each Elementary GLOBE module contains a science-based storybook and classroom learning activities.

Participants will each receive the five module booklets and related resources. Hands-on activities and tours of selected ecosystems of Beechwood Farms Nature Reserve are included. Lunch is provided.

**6 Act 48 hours**

**Ages: Adults**

**\$50**

**Beechwood Farms Nature Reserve, Fox Chapel**

**8:30 am – 3:30 pm**

**Contact Jane Konrad at 412.648.7315 or [konrad@pitt.edu](mailto:konrad@pitt.edu) to register**

# From Schoolground to Classroom

## The Game of Life

Adapted from: Molly Harrison. 2004. NOAA Fisheries, Office of Protected Resources [www.nmfs.noaa.gov/pr/](http://www.nmfs.noaa.gov/pr/)

**Objective** Students will describe what it means for an animal to be threatened or endangered

### Materials

- Large recess ball labeled “Life”
- Color cards or stickers (2 red, 4 green, 6 blue, 8 yellow)

### Procedure

1. Distribute the color cards or stickers to each student. Explain that the students are members of one species of animal that lives in the area. This group is called “Native Species”
2. Outdoors, have students distribute themselves so that colors are spread out evenly around the space and the students are far enough apart from one another to toss the ball with some difficulty.
3. Have the kids toss around a ball labeled, “Life” for a minute or two. Discuss with the students how easy or hard this is. Explain that when Native Species have plenty of members, it thrives in its habitat.
4. Explain to the students that one of the greatest threats to Native Species is **habitat loss**. Announce that a new housing development has been constructed within their space, causing the loss of sources for food, water, and shelter. Some members of Native Species are more susceptible to habitat loss than others. All of the yellow cardholders have to sit down.
5. Have the students who are still standing resume their game of toss. Have the students describe how the loss of the yellow team members has impacted the game (longer throws for some and not others; fewer people to choose from when you toss the ball, etc. . .).
6. Announce that a population of animals from another part of the world has found its way into the space. These **invasive species** are eating food and taking shelters away from members of Native Species who can’t compete well. All of the blue cardholders have to sit down.
7. Have the students who are still standing resume their game of toss. Explain that Native Species is now considered a **threatened species**. There are still some members of the original team left, but the numbers have declined significantly. Native Species has become vulnerable to extinction.
8. Announce that, even though Native Species is listed as threatened, some human beings are continuing to **illegally hunt** the species. All of the green cardholders have to sit down.
9. Have the red cardholders continue to toss the ball. Explain that with only a few individuals left, Native Species is now considered an **endangered species**. If anything else causes any students to sit down, few or no members will be left to toss the ball (carry on life). Discuss what could happen to the remaining students (pollution, disease, limited distribution, lack of reproduction).
10. Gather all of the students together. Ask the students to determine the primary culprit for Native Species’ demise. What organism caused habitat loss, invasive species introduction and illegal hunting? Explain that humans are the primary influence on the loss of native species. Have students discuss whether humans can reverse these adverse impacts. Be sure to tell the students the story of the bald eagle and its journey back from extinction.



SEASONINGS  
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412-963-6100  
[www.aswp.org](http://www.aswp.org)

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## **BEECHWOOD FARMS NATURE RESERVE**

614 Dorseyville Road

**FROM PITTSBURGH** Take Route 28 North, from downtown Pittsburgh, and exit onto Route 8 North, toward Butler. At the first traffic light, turn right onto Kittanning Road. (Kittanning Road is a very narrow street that winds up Sharps Hill). Continue on Kittanning Road for 4.5 miles. Kittanning Road becomes Dorseyville Road. Beechwood is on the left.

**FROM THE NORTH AND WEST** From the Turnpike, Exit 4, take Route 8 South, toward Pittsburgh. Proceed 3 miles to traffic light, just past Hampton Inn. Turn left onto Harts Run Road (follow Green Belt signs), and continue 3 more miles until you come to a “T” in the road. Turn right onto Dorseyville Road, and proceed a short distance to Beechwood, on the right.

**FROM THE EAST** Take the Turnpike, Exit 5 and proceed South on Old Route 28. At the Eat N’ Park, turn right onto Guys Run Road. Go 4.1 miles to the stop sign at Dorseyville Road. Turn left and drive .7 miles to Beechwood, on the right.

