Seventh Annual Land Ethics Awards Presented at 2017 Land Ethics Symposium

Bowman's Hill Wildflower Preserve presented their 17th annual Land Ethics Awards at the Land Ethics Symposium on March 9th at Delaware Valley University in Doylestown, PA. The award honors the creative use of native plants in the landscape, sustainable and regenerative design, and ethical land management and construction practices. The Land Ethics Award is an important part of the Preserve's efforts to inspire the appreciation and use of native plants and serve as an educational resource for conservation and stewardship.

This year we had an overwhelming response, and we'd like to thank our judges – James Bray, Don Borden, and Karen Budd – for another fabulous job choosing our winner, United Friends School of Quakertown, PA.

Preserve Honored with VBC Award

Bowman's Hill Wildflower Preserve is honored to be the recipient of The Community Service Award presented by Visit Bucks County. The award goes to an organization who develops and implements initiatives that positively impact the Bucks County community. We are so thankful to receive this recognition.



This private Quaker school has integrated three unique garden types into its landscape plantings, which are central to the school's elementary curriculum that focuses on land stewardship. The grounds feature a community vegetable garden with a native plant demonstration bed to demonstrate the value of organic vegetable gardening and native plants; a rain garden to teach about stormwater harvesting; and a parking island garden to illuminate the benefits of filtration.

The community garden was installed by a third-grade class, who raised money for the initial plantings, and is maintained by parent volunteers throughout the year. The garden is home to a variety of flowers, providing pollen and nectar for the insects that help pollinate its fruits and vegetables. Students visit the garden to learn about native bees, pollination, and plant reproduction, while the community enjoys its bounty with an annual garden party.

The rain garden was recently installed in a location central to all children's lives, the playground. Fed by rainwater from a downspout on the school, the garden was planted by pre-schoolers, kindergartners and first-graders. Integral to the children's daily lives, they now play among the plants and their visiting insects. Middle school students take advantage of the garden to study and identify native plants and to monitor the life cycle of the monarch caterpillar.

The parking lot island, formerly overrun with weeds, was replanted with native perennials and grasses. It is now a beautiful natural feature, dense with healthy plants that require almost no maintenance or supplemental watering. Located prominently on the school's perimeter, this island serves as a showcase for native landscaping in an urban environment to the surrounding community.



Our judges had this to say about the project: "Educate them when they are young and you have them for a lifetime. That is one of the key components of this student undertaking. This project beautifully illustrates what can be done with a minimum of money in a small space and dealing with an environmentally degraded area."

"The most salient feature of this project is that land stewardship is now a vital part of the students' curriculum and the gardens provide an on-site demonstration as to how to get nature working for us, instead of against us. The well thought out maintenance plan will cement the project's environmental gains in the years ahead."

An Award of Merit was presented to Jenkins Arboretum for their Trout Creek Restoration Project in Devon, PA. In the last six years, the staff and volunteers of the Arboretum have re-established the ecological value of the property through an ambitious ten step hands-on approach. The value of this ongoing project is readily apparent as a functional watershed replete with beautiful native vegetation. Unilateral buy-in to a long range restoration and maintenance plan ensures the ecosystem will remain highly functional for years to come.

Congratulations to United Friends School and Jenkins Arboretum. To learn more about these projects, please visit www.bhwp.org.

TWINLEAF

Published three times per year as a benefit of Preserve membership.

Bowman's Hill Wildflower Preserve P.O. Box 685 1635 River Road New Hope, PA 18938-0685 Phone: (215) 862-2924 Fax: (215) 862-1846 Website: www.bhwp.org Email: bhwp@bhwp.org

The Preserve is located 2 ½ miles south of New Hope, PA at 1635 River Road (Route 32). Open year-round. Grounds are open 9 am – sunset daily.

Visitor Center and Twinleaf Gift Shop

Open 9 am – 5 pm.Tuesday through Sunday, Memorial Day, and Labor Day. Closed Thanksgiving Day and 12/24 through 1/1

Admission

Preserve Members: FREE
Non-members:
Adults: \$6
Seniors (62+): \$4
Full-time students: \$4
Children 3-14, \$3
Children under three are FREE

Preserve Staff:

A. Miles Arnott, Executive Director
Jake Fitzpatrick, Nursery Manager
Rick Fonda, Grounds Manager
Rich Gallagher, Facilities & Maintenance Coordinator
Amy Goldstein, Membership Coordinator
Susan Harrington, Administrative Assistant
Lauren Johnson, Communications Coordinator
Kelly Joslin, Education Coordinator
Jason Ksepka, Curator
Jo Ann Mitidieri, Visitor Services
Regina Moriarty, Volunteer Coordinator
Sue Owens, Bookkeeper
Donna Rhodes, Development Director
Scott Sharff, Development Assistant
Maggie Strucker, Pocket Meadow Coordinator

Botanical Illustrations by Heather Lovett

Bowman's Hill Wildflower Preserve inspires the appreciation and use of native plants by serving as a sanctuary and an educational resource for conservation and stewardship.

Bowman's Hill Wildflower Preserve is managed by the Bowman's Hill Wildflower Preserve Association, Inc. in cooperation with the Pennsylvania Historical and Museum Commission. A copy of the official registration and financial information may be obtained from the Pennsylvania Department of State by calling 1-800-732-0999. Registration does not imply endorsement.



Message from the Director

What comes to mind when you think of the Preserve? How would you describe it to someone who has never been here before? A simple answer to those two questions can be surprisingly elusive – the "Preserve" is a dynamic and evolving organization that involves both the concrete and the abstract. How do you describe such a complex concept in just a few words? What would your "elevator speech" – that 30-second sound byte in which you get to describe this special place – sound like?

In my capacity as Executive Director I am often called upon to describe what we do here and why it is important. Whether it is one-on-one with a potential donor, or speaking to the press to promote the Preserve. I suspect many of our members or volunteers have also been asked to describe what the Preserve is and why it is special. Something that has helped me through the years is thinking of the Preserve in terms of the four "Ps" – Plants, Programs, Place, and People.

The Plants are the cornerstone of what we do here – nearly 800 species of native plants growing in recognized plant communities that sustain themselves over time. Those plants are documented, catalogued, curated, and interpreted as part of the Preserve's living collection and serves as the basis for our accreditation with the American Alliance of Museums.

Educational Programs are our reason for being. We serve as an educational resource for information about native plants and their importance to all life. We actively interpret our living collection of native plants in ways that are meaningful and relevant in people's lives. From botany to horticulture, from photography to wellness, our programs are designed to inspire action and change behavior in pursuit of a healthy and diverse natural world.

The Place is rich in both geologic and human history and the effect of each can be observed in the landscape we see today. Events hundreds of millions of years ago gave rise to the bedrock, hills, streams and soils which in turn combine to form the many microhabitats that support an amazing diversity of plants. Human activity, from the farming of the colonists beginning in the 17th century, through to the formation and nurturing of the Preserve over the last 83 years, is also an important part of the story here.

The final "P" refers to the People who make the Preserve truly special. Our volunteers are the lifeblood of the organization and give so freely of their time in the Native Plant Nursery, at the front desk, working on various committees, or serving on the Board of Trustees. Our naturalists lead walks, lend advice to home gardeners at our plant sale, and create content for our Preserve publications. Our staff is a dedicated group of professionals who love what they do, and their enthusiasm inspires our visitors and volunteers. In this nurturing community of staff and volunteers you can develop new friends and learn new things all while being part of a larger effort to make the world a better place. Collectively we create a positive culture where learning and volunteering are highly valued in pursuit of a mission that is bigger than any one of us. You can feel it when you become involved here – it is palpable, it is purposeful, and it is essential to everything we do.

None of the "Ps" can stand alone – each is dependent on the other three for context and meaning. These four "Ps" are so important and so central to who we are that they form the framework of the new strategic plan as well as the website redesign which we plan to unveil this summer.

So next time someone asks you about the Preserve simply let the four "Ps" be your guide!

- Miles Arnott, Executive Director

PEOPLE

Meet our 2017 Summer Interns

Our search for summer interns begins long before the cold days of winter begin to lengthen. Each year we receive applications from a number of highly qualified and enthusiastic college students, each vying for a coveted spot at the Preserve.

Choosing the right interns is tantamount to the success of the Preserve in many ways. Not only do our interns lead programs and 2pm tours, they also help with upkeep of the grounds, keep the nursery watered and weeded, supervise summer students, aid collections and complete a notable project. We're lucky to have these three young ladies spend their summer with us:



Kristen Boni is from Freehold, NJ and is a junior at The College of New Jersey. She is a biology major with a psychology minor and loves learning, especially about ecology and plants. She loves to hike and spend time outside to enjoy nature. Environmental conservation is very important to her, and this summer she is very excited to learn hands-on conservation skills and to share her passion for the world we live in.

Marilyn Can is a creative nature enthusiast pursuing a bachelor's degree in Biology, Ecology and Conservation at Indiana University of Pennsylvania. Her interests include hiking and photography. She is especially passionate about plant identification, and is excited to expand her knowledge in that field this summer. She is also eager to learn how to take care of plants and create lesson plans to present to the public.





Kristie Lane Anderson is a graduate student at Temple University, where she is studying landscape architecture with a focus on ecological restoration. When she doesn't have her nose in the books, she spends her time making art, canoeing, and volunteering with a local Search and Rescue team. She is delighted to be at BHWP this summer, and is eager to get her hands in the dirt to enrich her knowledge of native plants, propagation, and other horticultural skills.

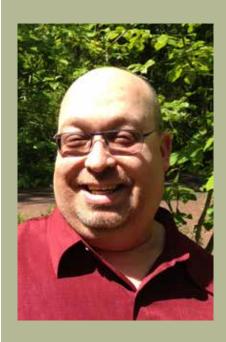


Swamp Rose Mallow - Hibiscus moscheutos

Please welcome Scott Sharff, BHWP's new Development Assistant

Since retiring as a dancer in 1991, Scott has been a professional fund raiser having raised over \$20 million dollars. He has an extensive background in planning and executing numerous events. He will also be serving as our data base coordinator for all connected activities.

Originally from Philadelphia, Scott graduated from the Philadelphia College of Performing Arts' Performing Arts School, The Juilliard School, and The Meadows School of the Arts at Southern Methodist University.



Curator's Update

As we move toward summer, 2017 is shaping up to be a very good year. We are having a cool moist spring which is great for extending the bloom period of our woodland flowers, and for allowing young plants to establish healthy root system before the stress of the dry summer heat. Something exciting going on at the Preserve right now is the germination of much of the seed I collected during the 2016 and early 2017 field season. We have approximately 120 trays of seedlings that will need to be potted up over the summer to get ready for sale in the fall 2017, and spring 2018 plant sales, as well as planted out on the Preserve grounds.



Some of the species that I am most excited about are Sanguisorba canadensis (Canadian burnet from Morris County, NJ seed), Liatris spicata (dense blazing star, from Montgomery County, Pa. seed!), Asclepias exaltata (poke milkweed, from Morris County, NJ seed), Asclepias viridiflora (green comet milkweed, from Somerset County, NJ seed), Asclepias purpurascens (Montgomery County, Pa. seed), Gentiana andrewsii (bottle gentian, from Montgomery County, Pa. seed), and Opuntia humifusa (prickly pear cactus, from Monmouth County, NJ seed). These are just a few of the different species that are happily growing in our greenhouse right now. We hope to be able to offer some of these plants in the fall plant sale, and most will be ready for our spring 2018 sale.

Thinking ahead to next year and what we will want to grow has me out collecting seed and stock material for the Preserve. Some acquisitions that I am excited about so far are *Diospiros virginiana* (persimmon), a beautiful tree that is a preferred host plant for luna moths and has high wildlife value because of its delicious fruit. *Lespedeza violaceae* (violet bush clover), a beautiful legume with value as bird food during the winter when



many other seeds are no longer available. *Phacelia bipinnatifida* (fernleaf phacelia) is a rare species which we found growing in amongst our ferns this spring! Hopefully this beauty will establish itself at the Preserve. *Castanea dentate* (American chestnut) trees were generously donated by Archewild Nursery, of Quakertown for us to plant at the Preserve. These are pure American chestnuts of local regional stock, that are part of the long-term breeding program of the ACCF. For additional information see the American Chestnut Cootperator's Foundation website: www.accf-online.org

- Jason Ksepka, Curator







Follow Us!

Be sure to follow us on your favorite social channel to learn about upcoming programs, events, and all things native!

FACEBOOK @BowmansHillWildflowerPreserve

TWITTER

@Bowmans Hill WP

INSTAGRAM @wildflowerpreserve

Spring Opening of the Native Plant Nursery

We featured the Grand Opening of our Native Plant Nursery earlier this year, on Saturday, April 22nd. Kathy Salisbury of the Penn State Extension started the day off with a lecture on "Fascinating Plants of the Delaware Valley." Our members then got first dibs at the plants we have been nurturing all winter. For the first time, we opened the Nursery gates and had the check-out area where we usually do our propagation work. Our Mini-Bog Garden Make & Take Workshop was a success, and our new Starter Planter Pots made their debut. Despite the rain, our hardy members came en masse and made the day a great success, and we sold over 3,000 native plants on Opening Day! A special thank you goes to our propagation volunteers, naturalists, and plant sale



volunteers for getting us well prepared for the event and making things run smoothly.

The Nursery is open all season, with new selections becoming available each week, and Members now save 10%! Be sure to check back often.





Calendar of Events

July - December 2017

Pat Sutton's Landscape Design with Wildlife in Mind Sunday, Sept. 17th, 10 am - 1 pm

Members: \$45; Non-members: \$50. Advanced registration and payment required by Sept. 13.

In this property-owner workshop, Sutton will emphasize designs that work with nature, not at odds with nature. Choosing the right plant for the right spot (and the right site for different elements of a wildlife habitat) is key. The program will showcase multidimensional, diverse, layered and interesting-to-the-eye natural landscapes that benefit wildlife, emphasizing to "let nature be the guide." Typical landscaping (lawn and uniform park-like plantings) pales in comparison.

Pat Sutton lives near Cape May, N.J., and has keenly studied the natural world for over 30 years. She is a freelance writer, photographer, naturalist, educator, lecturer, tour leader and wildlife garden consultant. Pat is a passionate wildlife gardener and advocate for butterflies, moths, bees (all pollinators), birds, dragonflies, frogs, toad, and other critters. Pat has taught gardening for wildlife workshops and led tours of private wildlife garden. Sutton's own wildlife garden is a "teaching garden" featured in many programs, workshops and garden tours.



SAVE THE DATE! Native Plant Nursery Fall Event Members' Preview Sale & Lecture

Saturday, Sept. 9th

Members Only Flower to Tower Hike Sunday, Oct. 8th, 9 - 11 am

Members: FREE

Preserve members are in for a special treat! Naturalist guides will lead the way for this early morning walk from our Visitor Center up to Bowman's Tower. Along the way we'll discuss some of the interesting plants and habitats that we encounter. Then we will venture up to the top of the tower to see the spectacular view of the surrounding landscape and end with donuts and cider. Space is limited. Call to register by October 2. Please note: walk is steep and can be strenuous near the top of Bowman's Hill. Please bring your own water.

Fall Nature Play Day

Saturday, Sept. 23rd, 1 - 4 pm

Members: FREE; Non-members: \$3

This family-friendly event will include self-guided activities and an art project in the Visitor Center with a focus on nature's recyclers. Come explore hands-on stations about healthy soil, see a composting demo and explore what lives in leaf litter. Our grounds will be open to explore during this drop-in day. Bring your family, friends and neighbors.

Kids & Family Fun

CHILDREN'S SUMMER READING PROGRAM

Every Thursday through Aug. 17th, 10 - 11:15 am

Members: Free; Non-members: \$7 for one child with adult + \$3 for each additional child. Registration required the Tuesday prior to each session.

Explore - Read - Connect to nature! Each week we'll read exciting books about the outdoors, take hikes in search of the plants and critters in our stories, and make nature crafts to take home. Topics change weekly. For ages 3 to 8. Children must be accompanied by an adult.

NATURE EXPLORATIONS

Fascinating Fireflies

Friday, July 7th, 8 - 9:30 pm

Members: \$6/adult; \$4/child. Non-members: \$8/adult; \$6/child.

Join us for a magical journey as we learn about these whimsical creatures. After a short discussion on firefly life history, we will decorate a catcher and head out just as the first twinkles begin. This program is sure to bring out the kid in everyone.

Creek Walk

Sunday, July 23rd, 10 - 11:30 am

Members: \$6/adult; \$4/child. Non-members: \$8/adult; \$6/child. Advance registration required by July 20th.

A healthy "riparian zone" (a buffer of plants and trees that grows along streams) helps create high quality habitat in streams for fish, other aquatic organisms and wildlife. Come explore Pidcock Creek with us to see firsthand the benefits our native plants have on aquatic creatures. Wear shoes and clothes that can get wet. Ages 7 and up.

National S'mores Day Celebration

Thursday, Aug. 10th, 7 - 8:30 pm

Members: \$5; Non-members: \$8. Register with pay by Aug. 8th.

There is no better way to celebrate National S'mores Day than by making your own around the fire! Bring the entire family out for a night around the campfire where we'll share stories and make s'mores. Program takes place at the Moore Pavilion.

Bat Chats

Session I: Wednesday, Aug. 16th (rain date 8/17) 7:30 - 9 pm Session II: Wednesday, Aug. 23th (rain date 8/24) 7:30 - 9 pm Members: \$6/adult; \$4/child. Non-members: \$8/adult; \$6/child.

Bats are incredible creatures. They are excellent parents, are insect-eating machines and have valuable roles in our ecosystem. Join Matthew Wund, Ph.D., to discover the species that call Pennsylvania home, the challenges they face and the important services they provide. Indoor presentation followed by outdoor bat hike where participants will use bat detectors to listen to echolocation calls.

Matthew Wund is an associate professor of biology at The College of New Jersey in Ewing. His expertise in bats stems from his graduate work at the University of Michigan, Ann Arbor, where he earned his Ph.D. in ecology and evolutionary biology.

Nature at Night

Saturday, Sept. 16th, 7 - 8:30 pm

Members: \$6/adult; \$4/child. Non-members: \$8/adult; \$6/child.

Nocturnal nature is full of beauty and mystery and September is a great time to explore the Preserve and discover the fascinating life history of creatures big and small. Bring a flashlight or headlamp and we will search the meadow for signs of nocturnal nature, including the most industrious of them all—spiders!

Woodland Fairy Tales Saturday, Sept. 30th, 1:30 - 3 pm

Members: \$10 with non-paying adult; Non-members: \$15 with non-paying adult. Advance registration by Sept. 28th.

Don your fairy wings and join us for a magical afternoon as we journey through Penn's Woods to help the plants and animals of the Preserve. Use natural materials to create a special shelter for our woodland fairies. Program includes a story, art project and snack by the pond.



Woodland Pumpkin Hunt Saturday, Oct. 24th, 2 - 4 pm

Members: \$15 with non-paying adult; Non-members: \$18 with non-paying adult. Advance registration with payment by Oct. 22nd.

Take a magical journey in the woods though the eyes of Mousekin as he and the plants around him prepare for the coming winter. We'll search for food and watch for predators, then find our own "golden house" to decorate and take home.

NATURE BUDDIES

Fridays, 10 - 11:15 am

Members: Free; Non-members: \$7 for one child with adult + \$3 for each additional child. Registration required by the Wednesday prior to each program.

Nature Buddies programs include a story, an outdoor walk and a take-home craft. This program is appropriate for ages 3 through 7. Children must be accompanied by an adult. Walks are weather dependent; please dress for the weather.

Nuts to You! —Sept. 15th

The comical ways of bushy-tailed tree planters.

Nature's Recyclers—Sept. 29th

Explore a rotten log and discover the roles played by the unsung heroes of nature—the decomposers.

Sensational Seeds—Oct. 13th

Discover the magic of the "sleeping" seed.

Fall into Autumn—Oct. 27th

Fall in love with fantastic fall foliage.

Workshops & Events

ECOLOGY & CONSERVATION

Weed Patrol

Saturdays, 9:30 am - noon July 1st, Aug. 5th, Sept. 23rd, Oct. 7th

FREE. Pre-registration suggested.

Join Grounds Manager Rick Fonda for a fun morning out in the woods. Learn to identify native and non-native plants, and how to remove and dispose of invasive species properly. Your efforts will help to protect our collections of rare and endangered plant species. Groups, individuals and families welcome. Gloves and tools supplied or bring your own. Weather dependent. Call to register or email Regina Moriarty at moriarty@bhwp.org.

North American Butterfly Association (NABA) Butterfly Count

Saturday, July 22nd, 10 am - 4 pm

\$3 per participant, all proceeds donated to the North American Butterfly Association. Pre-registration suggested.

Join us for an all-day event focusing on our fluttering friends. Why count butterflies? It helps scientists piece together the big picture of the distribution and population size of each species counted, including changes over time. And it's fun! You'll learn to identify the different types of butterflies and the native plants they utilize at the Preserve. Please bring binoculars or a camera with a zoom lens, and a field guide, if available. Make sure you have plenty of water, snacks and appropriate sun protection. Join us for all or part of the day. All experience levels are welcome, from beginners to experienced butterfliers. Please meet at the Visitor Center.

Dragonfly I.D. Workshop Saturday, Aug. 12th, 10 am - 1 pm

Members: \$15; Non-members, \$20. Advance registration required by Aug. 10th.

Learn about the fascinating world of dragonflies from one of the masters in the field. Mike May, Ph.D., will teach you about the basics of what members of the Odonata family are, their life cycles and behavior, and give you an inside glimpse into his research. Program includes a presentation indoors and a journey outside to search for adult and larva. Binoculars are helpful but not required.

Mike May grew up in Florida and began collecting insects at



Photo: Tom Potterfield

a young age. He earned his Ph.D. at the University of Florida and spent three years on postdoctoral appointments in Panama and the University of Illinois. He is coauthor of two books: Damselflies of North America and A Manual of the Dragonflies of North America, and author/co-author of more than 60 scientific papers.

Backyard Composting

Tuesday, Sept. 26th, 7 - 8:30 pm

Members: \$8; Non-members: \$10. Advance registration required by Sept. 24th.

Did you know home composting reduces methane emissions and helps sequester carbon—all in the space of your own backyard? And you can create a home-grown soil amendment, which will make your soil, your garden and the rest of your landscape environmentally healthier. This session explains how to compost vegetable and fruit waste from your kitchen, along with other organic waste. We will discuss compost "recipes," how to choose or build a composter, and how to troubleshoot for any challenges that arise. A countertop collection container and easy-to-use handout with reminders from the session and a resource list for further reading will be provided.

ART & NATURE

Holiday Wreath Workshops

Saturday, Dec. 2nd Session 1: 10 am - noon Session 2: 2 - 4 pm

Members: \$55; Non-members: \$65, including all materials. Registration with payment required by Nov. 30th.

Join the fun and make a festive holiday wreath out of natural materials and native plants including juniper, white pine and holly. Preserve Executive Director Miles Arnott will lead the workshop with step-by-step demonstration and hands-on instruction to help you create a work of art that you'll be proud to display during the holiday season. Space is limited, so register early.

Edible Ornaments for Birds

Saturday, Dec. 9th, 3 - 4 pm

Members: \$10; Non-members: \$12

Advance registration with payment required by Dec. 6th.

During the winter, it is a challenge for birds to find sufficient food to survive because natural food sources are limited. Make several natural "ornaments" for birds that you can use to decorate outdoor trees. Please bring a container for your ornaments.

ALLERGY ALERT: Nuts are used in projects.

HEALTH & NATURE

Outdoor Qigong: Movement & Healing 3 Thursdays, Aug. 24th - Sept. 7th, 11:15 am - 12:30 pm

Members: \$12; Non-members: \$15 per class

Qigong is an ancient Chinese self-care practice rooted in traditional Chinese medicine. Qigong's gentle movements, rhythmic breathing and meditative state of mind are used to restore and heal both the body and the mind.

Please join us for a three-part series where we will practice Qigong in three different outdoor environments at the Preserve, each with unique healing properties. You are welcome to sign up for the whole series or for individual sessions. Please wear comfortable clothes and shoes.

Sandy Unger, M.A., is a Tai Chi Easy- and Qigong-certified Community Practice Leader trained through the Institute of Integral Tai Chi and Qigong.

Workshops & Events

BIRDING

Sparrow Identification Workshop Sun., Sept. 10th, 1:30 - 3:30 pm

Members: \$20; Non-members: \$25

Pete Bacinski leads a comprehensive identification workshop featuring over 25 of our resident and wintering sparrows as well as common rarities that visit Pennsylvania and New Jersey. A PowerPoint presentation will illustrate field marks and clues to identification.

Pete Bacinski has been a naturalist, photographer, field trip guide and a leader in the field of ornithology for many decades. He has written for numerous local, state and national publications and has won the World Series of Birding Competition three times.



Session 1: Friday, Nov. 17th, 7 - 8:30 pm Session 2: Saturday, Dec. 9th, 7 - 8:30 pm

Members: \$8; Non-members: \$10. Please register for each program separately. Space is limited. Advanced registration required.

Join us for an after-hours hike as we search for these nocturnal birds. We'll start indoors and discuss how to identify the species we may see or hear. Dress for the weather and be prepared to walk through possible wet trail conditions.



Photo: Jean Barrell

Winter Waterfowl Field Trip Wednesday, Dec. 6th, 8 am - 5 pm

Members: \$25; Non-members: \$30 Advance registration required by Dec. 3rd.

Many species of waterfowl make a migratory stop at the Edwin B. Forsythe NWR in Oceanville, N.J., on their way south. Education Coordinator Kelly Joslin and birders Chris and Gerry Dewaghe will serve as your hosts and guides on this special visit to "Brig." We'll look for brant, teal, scaup and others, plus we may get bonus birds like peregrine falcons, bald eagles and winter sparrows along Wildlife Drive. Spotting scopes and snacks will be provided. Please dress for the weather, bring a sack lunch and binoculars. This program meets at the NWR. Transportation is not provided. Directions will be provided after registration.

PENN STATE EXTENSION PROGRAMS

Professional Series: Native Plants for Landscapers Sept. 22nd: Fall Blooming Perennials Oct. 20th: Trees Meets 10 am - noon \$15 per class

This series, presented at the Preserve by Penn State Extension-Bucks County, is designed for landscape professionals. Learn common and underused native plants that are well suited for a variety of residential and commercial landscape applications. Plant identification, seasons of interest, cultural needs and availability will be discussed. We will also address invasive plant identification and management. Contact Kathy Salisbury at 215-345-3283 or kvs14@ psu.edu for more details and to register.

Professional CEUs available. Please dress for the weather.

Penn State Extension-Bucks County Office Presents: Meadow School for Landscapers Friday, Aug. 4th, 9 am - 3:00 pm \$65 per person

Regional green industry professionals are invited to Join Penn State Extension-Bucks County and Bowman's Hills Wildflower Preserve for a day-long program about meadow planning, design, plant selection, installation and maintenance. By discussing when a meadow is an appropriate option, learn all about this popular alternative to the traditional lawn and green infrastructure techniques that can help you manage storm water. Contact Kathy Salisbury at 215 345-3283 or kvs14@psu.edu for more details and to register.

Professional CEUs available.

Big Bluestem - *Andropogon gerardii*

Talks, Walks, & Lectures

BOOK DISCUSSIONS

Red-Tails in Love: A Wildlife Drama in Central Park Saturday, Aug. 19th, 10 am - noon

Members: \$10; Non-members: \$12 Advance registration required by Aug.16th.

Join Naturalist Monica Flynn as we learn about the natural history of Central Park and beyond through the eyes of Pale Male, a very special hawk indeed. Book discussion will be followed by tour of the meadow, where we'll look for our very own red-tailed hawk and discover the food web that supports him. Participants should read Red-Tails in Love: A Wildlife Drama in Central Park by Marie Winn prior to the program.

LECTURES

Tales from a Naturalist's Diary with Pete Bacinski Sunday, Nov. 5th, 1:30 - 3:30 pm

Members: \$20; Non-members: \$25

Join us for a program that is complete with all those natural history facts and questions you never thought to ask. Filled with images of Mother Nature's oddities, naturalist Pete Bacinski's presentation will touch on birds, wildflowers, ferns, mammals, and reptiles and amphibians, as well as many unusual natural history events. Naturalist Diary is designed to be enjoyed by the whole family.

NATURE EXPLORATIONS

Butterfly Lifestyles

Saturday, July 15th, 10 am - noon

Members: \$10; Non-members: \$12

Over 50 species of beautiful butterflies can be seen at Bowman's Hill Wildflower Preserve. Learn about the lifestyles of some of the common and uncommon species from Naturalist Mary Anne Borge, including the ones that make their home here and what makes this such a special place for butterflies. Indoor presentation followed by an outdoor hunt to see how many butterflies we can find.



Photo: Tom Potterfield

Mary Anne Borge is a naturalist, photographer, writer and educator. She is a certified Pennsylvania Master Naturalist, a contributor to Butterfly Gardener magazine and has been a volunteer at the Preserve for more than 10 years. She shares her fascination with nature through her writing and photography on her blog, www.the-natural-web.org.

Mushroom Walk

Saturday, Oct. 21st, 10 am - noon Members: \$12; Non-members: \$15

Many plant-focused people are not aware of the important roles that fungi, including mushrooms, play in the lives of plants. There would be no land plants were it not for the fungi that nourish them! Marion Kyde, Ph.D., will cover a few of the amazing things that you probably don't know about fungi, along with photos of the colorful and unusual macrofungi in our

woods and fields. Much of the information will be about new research which is telling even mycologists what they don't know about fungi.

Marion M. Kyde, Ph.D., lives in Tinicum Township in the middle of a woods full of mushrooms. She has lectured locally on mushrooms for 20 years and writes for the Tinicum Conservancy Newsletter and the Bucks County Herald on environmental and local issues.

Learn About Lichens

Saturday, Nov. 18th, 1 - 4 pm

Members: \$15; Non-members: \$20 Advance registration required by Nov.

Are they plants? Are they fungi? No, they're both! Lichens are everywhere you look, and they are as fascinating as they are ubiquitous. Join Lichenologist Dennis Waters to learn about these remarkable botanical partnerships how they work and how they have grown to be so dependent on each other. Following a short talk, we will Photo: Dr. James Lendemer take an excursion into the Preserve to



find lichens growing on trees, on rocks and on the ground. You will learn about their lifestyles, their habitats, and their important contributions to ecosystems. Please bring a 7-10x hand lens if you have one. A limited number will be available to borrow.

Dennis Waters has been a lichenologist for 10 years. He is currently completing the first lichenological survey of Mercer County, N.J., in collaboration with the New York Botanical Garden, the Mercer County Park Commission and the D&R Greenway Land Trust.

SPECIALTY WALKS

Morning Meadow Walks

Wednesdays, July 19th thru Sept. 6th, 10 - 11 am

Members: Free; Non-members: Included with Preserve admission. Preregistration suggested.

Amidst a sea of waving green grasses, native bees and butterflies gather nectar or pollen from milkweeds, mints, bonesets and coneflowers. Before the day heats up, take a guided tour of our 4-acre meadow to learn about native warm season grasses, meadow ecology and plant-pollinator interactions. This vigorous walk leaves from the Visitor Center.

Perimeter Walk

Saturday, Oct. 8th, 1:30 - 3 pm

Members: \$6; Non-members: \$10. Registration required by Oct. 5th.

The Preserve would look very different without our 10-foot-tall deer fence. Have you ever wondered what lies along the edge of such a significant perimeter that encompasses nearly 100 acres of pristine and diverse woodland habitat? Join Naturalist Les Swartley as he takes you on an excursion around our boundary to study the contrast between our grounds and the neighboring landscapes. This is a rigorous walk requiring a good degree of balance. Dress for weather and wear sturdy hiking shoes appropriate for possible wet terrain.

Talks, Walks, & Lectures

Whispers in the Woods

Sunday, Oct. 15th, 1:30 - 3 pm

Members: \$5; Non-members: \$7

Come join naturalist Mary Nogami for a leisurely walk in Penn's Woods and along Pidcock Creek. Under a colorful canopy of fall foliage, listen to stories about Revolutionary War soldiers and notable historical citizens of New Hope and Washington's Crossing whose lives still impact us today. Ages 8 and up.

Winter Solstice Walk

Thursday, Dec. 21st, 10 - 11:30 am

Members: \$6; Non-members: \$8

Instead of hunkering down and bemoaning the longest night of the year—also known as the winter solstice—celebrate with a stroll through the Preserve with Education Coordinator Kelly Joslin. We'll celebrate the joys of winter with a walk on the Preserve trails at a time when the sun is lowest in the sky and we experience the shortest days of the year. We'll conclude in the Visitor Center with hot drinks and cookies.



GROWING NATIVE PLANTS

Mini Bog Garden

Saturday, July 8th, 10 - 11:30 am

Members: \$40; Non-members, \$45. Advance registration with payment by July 6th required.

Join BHWP Education Coordinator Kelly Joslin and learn how to construct and care for a bog garden. Kelly will take participants step-by-step through the process of mixing specific soil media, planting techniques and carnivorous plant care. Each participant will take home a mini bog container garden with carnivorous plants, including thread-leaf sundew and pitcher plants.

Seed Collection

Saturday, Sept. 30th, 10 am - noon

Members: \$20; Non-members, \$25. Advance registration by Sept. 27th required.

We often forget that the reason for a flower is to manufacture seeds. Take advantage of the expertise of Preserve curator Jason Ksepka and learn how to collect seed from the plants in your own backyard. This class will take you through the steps needed to successfully and responsibly collect native plant seeds. Timing of seed collection, as well as techniques and supplies suggested for seed storage and cleaning, will also be covered. Participants will take home a packet of native seeds.

KNOWING NATIVE PLANTS

Saturdays, time varies

Members: \$15; Non-members, \$20. Advance registration suggested. Presentation/discussion followed by outdoor tour. Professional CEUs are available.

Meadow Magic: July 29th, 10 am - 1 pm

Come discover the Preserve's 5-acre meadow with naturalist Mary Anne Borge. See native meadow plant species, including wildflowers and grasses, and learn about meadow successional stages and some of the animals that depend on this habitat. Find out why these plants are important for soil stabilization and groundwater recharge.

Amazing Asters: Sept. 16th, 1 - 4 pm

Fall is peak bloom time for members of the aster family. Explore our woods and meadows with naturalist Mary Anne Borge to discover asters, goldenrods, bonesets, coneflowers, tickseeds and other yellow composites. We'll look for signs of the relationships these plants have with the insects, birds and other animals that depend on them.

Trees of the Preserve: Oct. 14th, 1 - 4 pm

Learn about many of our native tree species in the glory of their fall color! Do you know which native tree was originally used to flavor root beer? Or why leaves change color? The class will cover these topics and more, as well as provide tips on how to identify the trees of the Preserve, both deciduous and evergreen.

From Flowers to Seeds: Nov. 4th, 10 am - 1 pm

How do angiosperms reproduce sexually? Naturalist Ed Lignowski will answer this question by discussing the life cycle of flowering plants from pollination to fruit/seed dispersal. General anatomy of flowers will be covered, and specific examples of native plants will be used to illustrate the many interesting differences in floral structure and function that occur in nature. The events following pollination leading to the development of fruits and seeds will be explained. Learn about the various types of native plant fruits and examples of how they provide nutrition for wildlife.



NEWS

Summer Plant Highlights: What's Available in the Nursery

Springing up in our greenhouse are well over 100 species of native plant seedlings collected by our curator and volunteers. As we pot up these plants, some may be ready for sale/planting later this summer.

Of note are Butterfly Weed (Asclepias tuberosa), Common Milkweed (Asclepias syriaca), Swamp Milkweed (Asclepias incarnata), Green Milkweed (Asclepias viridiflora) and Poke Milkweed (Asclepias exaltata) are currently developing healthy root systems. Milkweeds are the essential food source for Monarch Butterfly caterpillars, which has seen its population plummet in the past twenty years. Check our website and look for an e-mail to learn



when these great pollinator plants become available.

Other notable plants making their way out of the Nursery this season include the American Chestnut (*Castanea dentate*), Spotted Bee Balm (*Monarda punctata*), Sundrops (*Oenothera fruticosa*), and Willow Oak (*Quercus phellos*).

Our plants grown from seed have the distinction of having local provenance. Knowing the provenance of the plants you buy ensures you are adding locally adapted genetics to your garden. Look for our blue stake tag label in our plants to know you are buying local natives.

Become a Volunteer Naturalist

Training Begins September 21st, 2017 - Fee: \$200

Are you passionate about the Preserve and eager to learn more about our plant collection and habitats? Do you enjoy sharing your knowledge of the natural world with others? If you answered "yes" to these questions, then our Naturalist Training Program is for you.

Naturalist trainees complete a total of 18 classes that cover geology, the natural and cultural history of the Preserve, invasive species and the complete 2018 Knowing Native Plant series. Core classes meet on Thursdays from 10 am - 1 pm:

Sept. 21st Orientation/Cultural and Natural History of BHWP
 Oct. 5th Botany Basics

• Oct. 19th Animal & Plant Ecology

Nov. 2nd Interpretation & Theme Development

Nov. 16th BHWP Trails & Geology

The 2018 Knowing Native Plant series will begin in mid-January 2018 and conclude in early November. Interested candidates should contact Volunteer Coordinator Regina Moriarty at moriarty@bhwp.org for application information.

Black Oak - Quercus velutina

MEMBERSHIP

Thank you to all our new Members. We look forward to seeing you at the Preserve!

The Achinstein Family The Adams Family The Albright Family The Ammentorp Family Carron Ankiel-Kohn Katherine Appel Don Bandurick The Bauder Family The Bean Family Karen Bennett The Berger Family The Bielunas Family Ann Bishop Linda Warren & David Blahna Nancy Blake Debra and Bruce Booth Kathleen & Joseph Borthwick Olena & David Boyko Celia Braam Lynn Braender Cynthia Brashear Linda Brehme Catherine Brown Jean & David Brown Mark Brynildsen **Bucks County Cottage** Barbara Buda Dave Burwell The Cantrell Family Hui Cao & John Weike Michele Carter Sarah L. Caspar Marc and Janet Celentana Ruth Rogers Clausen Howard Cogan The Collins Family Carol A. Colone

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The Dudash Family

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Jeana & Brian Enochson Kathleen Ernst

Margaret & Don Esposito Suzanna Fabry

The Fedorko Family Catherine Feeser

Carol Field Carol A. Fitzpatrick

Mr. & Mrs. Freemas Patty French

Did you know when you join BHWP during the summer, your membership is valid through December of the following year? Become a member today and enjoy a little bit more of our natural wonder at no additional charge!

Cari Freno The Fronabarger Family Dror Gliksman The Glossbrenner Family

Nora Glowinski

Marsha Golden

Susan Golus Eugene Gonzalez

Connie Goochee

Meg Gorrie

The Griggs - Keane Family Ryan Gunthner

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Pegeen Lanahan & Luciano Lizzi

John Lloyd Wanda & Harold Long

The Loonan Family

Richard Madden

Missbah Mahmood

Roger & Joie Maloof

Ginger Sue Mandy

The Marciano Family

Deborah Masterson

Ron McAlister

Deborah & Greg Mccloskey

Robert & Maria McEwan

Bridget McGettigan

Patrick McNamee & Danielle Vitorla

Linda Mcneill

Diane McNulty

Lucas & Eva Mergen

Rebecca Meyer

Jessica Miller

Richard Miller

Rosmarie & Mario Milletti

Katey Mohr

Betsy & Carl Molter

Margaret Montplaisir

Tracy Mosley

Carol Ann Moyer

Douglas Muller

M. Elizabeth Neilson

Simone & Mark Niemczura

Mark & Monica Norman

Caitlin Nugent

Abigail & Paul O'Neill

Melanie & Brian Parker

Ina Parker

Joyce & Frank Patota

Elaine Patrikas

Bruce Patterson

Tracy & Brian Patton

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The Pilieri Family

Ray Potluri

The Potter Family

Andrew Preston

Jennifer Preston & Christopher Conway

Diane Procaccini

Dana Pugorzelsk

Elizabeth Randolph

Heather & Chris Rhoads The Rhodes Family

Jacqueline Maben & Ronald Ricchezza

The Rich Family

Gabrielle Rinko

The Rocha Family

Susan Rudolph

Heather Sailer & Barry Caruso

Louise Salinas

Jeanne Sandusky

Stephanie Santucci

James Schleppenabch

Nick Scholle Carolyn Scott

Nancy Scott

Susan Scott

Maggie Semple

Denise Sezack The Siu Family

The Smokonich Family

Victoria & Robert Sparks

Nicholas Stanley

Robert Staudt

Josh Stauffer

Karen & Christopher Stead

Joan Stelmach

Mimi Stepek

Charlene Kwon & Daniel Stern

Philip Stollsteimer

John Stringer

Patricia Sutton

Lisa Tansug

The Tarnoviski Family

Anne Thierfelder

Amy Tomalin

Phin Tuthill

The Ulrich Family

Victoria Vassilious Sonia and Clinton Walker

John Wall & Alex Douglas

Carole & Guy Waltman

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Lawrence Weintraub

Esther Whelan Kathy Wilson

Iamie Witsen

Deborah Woodward

Kathy & Carl Woodwardt

Marcianne Wright

Rebecca Wunderlich

Karmann Yusishen

The Zhou Family

DEVELOPMENT

The Preserve Appreciates and Continues to Count on Funding from a Variety of Sources

Member and supporter Rebecca Blank of Church & Dwight Co., took the initiative to be an employee sponsor for Bowman's Hill Wildflower preserve in the Preservation of the Environment category of their annual Employee Giving Fund.

In 2016, the Preserve received a \$4,000 grant for their Pocktet Meadow/Habitat Initiative, which aims to create educational/pollinator-friendly spaces in schoolyards and non-profit and public spaces throughout the region. This year the Preserve again applied to the Annual Giving Fund to continue with the great success and progress of the initiative into 2017.

Church & Dwight Co., further supported the Preserve in their company's 2017 Earth Day fundraising activities, awarding funds to selected Employee Giving Fund partners dedicated to

environmental preservation. As a result, a check for \$809 was awarded to the Preserve.

Our Aquetong Meadow Regeneration Project is a result of a July 2016 microburst. This dangerous windstorm felled more than two dozen mature forest trees along our road frontage at the corner or River Road and Aquetong Road. Also destroyed was our road sign that welcomes visitors as they approach our site.

The July microburst attracted the attention of the Garden Club of Philadelphia, and we were honored to receive their \$2,500 donation. The club is looking for a tangible way to support a burn or another special need of the project. Their interest and donation to the meadow regeneration project is much appreciated to help us reach a needed goal of \$150,000

Recommended at the Twinleaf Gift Shop

After immersing yourself in the beauty of the Preserve, we encourage you to visit the Twinleaf gift shop where you'll find a unique collection of T-shirts, books and nature-themed-gifts for the entire family. All proceeds are used to further the Preserve's mission.

Here are a few trecommendations from BHWP Members and Naturalists. Consider adding them to your summer reading list.

The Hidden Half of Nature - The Microbial Roots of Life and Healthy by David R. Montgomery and Anne Bkle

Prepare to set aside what you think you know about yourself and microbes. Good health — for people and for plants — depends on Earth's smallest creatures. *The Hidden Half of Nature* tells the story of our tangled relationship with microbes and their potential to revolutionize agriculture and medicine, from garden to gut.

Pennsylvania Naturally: A Gardener's Guide to Sustainable Landscaping, by Geoff Mehl

Pennsylvania Naturally describes all the habitat types, the soils, and the native plants, but also is a toolkit of knowledge about geography, geology and ecology especially for gardeners. Geoff Mehl is a

Pennsylvania author who was inspired by the Native Plants and beauty of Bowman's Hill Wildflower Preserve.

The Nature Fix, by Florence William

The Nature Fix demonstrates that our connection to nature is much more

important to our cognition than we think and that even small amounts of exposure to the living world can improve our creativity and enhance our mood.

Preserve Members receive a 10% discount off of regular priced shop merchandise all year long!



Bowman's Hill Wildflower Preserve Hosts 14th Annual Wildflower Gala

Thank you so much for being part of the 2017 Spring Wildflower Gala! It was a warm and enchanting spring evening and a perfect opportunity to explore the Preserve and have fun in support of a great cause. Together we raised over \$50,000 during our Raise Your Paddle alone to Regenerate the Wild along River Road by creating a beautiful and diverse meadow right at our "front door." The creation of the new meadow will be a multi-year process that will unfold in the months and years ahead and I look forward to keeping you updated as the landscape grows and evolves.

In addition to funding the new meadow, your sponsorships, auction bids, and attendance all support the Preserve's educational programs and conservation mission. As a non-profit organization, Bowman's Hill Wildflower Preserve is one of the most significant native plant repositories in the mid Atlantic, and it is thriving right here in our community because of your generous support. Thank you again for caring so deeply about this special place and for helping us to Regenerate the Wild for future generations to learn from and enjoy!

We hope to see you again at next year's Spring Wildflower Gala!

A. Miles Arnott

The Preserve wishes to recognize and thank our generous sponsors and patrons:

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Thank you!













Summer Camps

Register now for our action-packed Summer Camps! Please visit www.bhwp.org/education/Nature-Summer-Camps.htm to fill out a camper registration form.

Nature Adventures Summer Camp

MTW, July 17th-19th, 10 am - 3 pm, Ages 8 - 12 Members: \$150*; Non-members: \$175*

We're thrilled to partner with the fine folks at Delaware River Canal State Park to offer a **NEW** nature adventure summer camp. Budding, young scientists will explore the marvels of nature as they learn and play amidst our 100-plus acres of ponds, meadow and forests. We will learn about birds, ecology and the natural and cultural history of our region. Campers will also learn to orienteer, geocache and go kayaking on the Delaware Canal.

 * A \$75 deposit holds your registration and full balance is due 2 weeks before the start of camp.

Magical Fairy Gardens Mini Camp

Monday, June 27th & Tuesday June 28th, 10 am - 12:30 pm Members: \$65; Non-members: \$75 Registration with payment required by June 22

Art inspires whimsical fairy gardens in this 2-day camp. Explore the outdoors as you collect pinecones, moss and branches to attract your fairies. Learn to plan and sketch a design, and then plant, build and paint. All materials included. For ages 7-12. Bring a water bottle and wear sneakers.

